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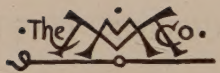

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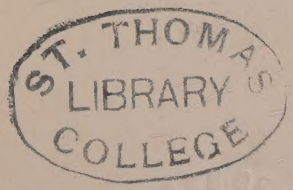
AN INTRODUCTION TO PHILOSOPHY

BY

JAMES H. RYAN

OF THE FACULTY OF PHILOSOPHY IN THE CATHOLIC UNIVERSITY OF AMERICA



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AUGUST 8, 1924.

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TO
MY MOTHER

PREFACE

The present work was written for college students as a means of introducing them to the study of philosophy. Being an introductory study, it makes no pretensions to an exhaustive treatment of any of the subjects discussed. The majority of college students, because of time limitations, are able to pursue the study of philosophy for only a semester or two. It is, therefore, most important in an Introduction not to stress philosophical questions which, because of their abstractness or secondary importance, will not appeal to the average student. Such problems may well be left to those who intend to take up graduate studies in a particular phase of philosophical thought. But that a general acquaintance with the central problems of philosophy is of great value to all students is evidenced by the increasing amount of emphasis which is being placed on this subject by those responsible for the construction of college curricula.

The writer has kept in mind constantly the young men and women attending our colleges. For this group he thought it best to develop the principles of philosophy in the form of projects. Fundamental problems are first presented, the different positions taken by successive thinkers outlined and discussed, and the student is encouraged and assisted to make up his mind on the theory which he shall accept. While the text is put forward as basal, it is not the intention of the author that it should be used solely as a textbook. It is rather a handbook to guide the student in the selection and presentation of the material which is discussed in the classroom. Moreover, since it is view-

points and not history which the student should take away with him from these discussions, insistence has been put on the topical presentation of the material, although the historical connections of the different theories have also been pointed out. The practical teacher will advise the constant use of a standard history of philosophy to accompany the study of the text.

Few things disturb the beginner in philosophy more than the difficulty of understanding the extremely technical language in use among philosophers. A conscious effort has been made to simplify as far as possible the work of the student by presenting philosophical theories in non-technical language. This has been done, even at the risk of not expressing exactly a particular thinker's position. The professional philosopher undoubtedly will find many things to criticize in this work. Let him remember that it was written, not for men trained in and long accustomed to the intricacies of philosophical thought, but for groups of immature students to whom the very word "philosophy" is strange, and whose acquaintance with its subject-matter and methods is nil.

Furthermore, the references cited are neither complete nor mandatory. Every teacher has his favorites among reference works, and is guided in the selection of them by the capacities of his auditors and the resources of the college library. The list given at the end of each chapter is merely suggestive, and contains only those books which will be found in any well-stocked college library.

It may not be out of place to state here that the problems of philosophy as presented in this book have been approached from the position of dualistic realism. The author is a realist, in the sense that he believes firmly in the reality of an extra-mental world and in the validity of our perceptions of it. He is a dualistic realist in this, that he

looks upon the distinction between subject and object, spirit and matter, man and God as primary and fundamental to all metaphysics.

The author has tried faithfully to indicate his indebtedness to previous writers, but is quite conscious that the full extent of it will scarcely appear from the brief citations offered in the foot-notes. In few fields is an author under such heavy obligations to his predecessors as in that of philosophy. In a special manner he wishes to acknowledge his obligations to his many teachers who initiated him into and encouraged the "love of wisdom." Particularly is he indebted in the preparation of this work to the encouragement of the Rector of The Catholic University of America, the Right Reverend Thomas J. Shahan, S. T. D. Monsignor Edward A. Pace, Ph.D., head of the Department of Philosophy in the same University, has assisted in countless ways. He is also grateful to his friend and colleague, the Reverend Charles A. Hart, who read this book in manuscript and made many helpful suggestions and criticisms.

James H. Ryan.

The Catholic University of America,
Washington, D. C.

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AN INTRODUCTION TO PHILOSOPHY

AN INTRODUCTION TO PHILOSOPHY

CHAPTER I

PHILOSOPHY, ITS MEANING, SCOPE, AND METHODS

Definition of Philosophy.—The word "philosophy" is a Greek derivative and means "love of wisdom." The ancient thinkers used the word to cover a wide range of subjects, including science and knowledge in general. To-day, philosophy has a very precise connotation. It does not include knowledge in general, but confines itself to the study of a series of problems which arise from man's consideration of the universe, and to which it proposes to give a reply.

In the popular mind, and even amongst many of the learned, philosophy is often held to be synonymous with vague speculations, divorced from life and incapable of solid proof. So widespread has become this false conception of the nature of philosophy that the term "metaphysics," which is a branch of philosophy, is quite generally used to express contempt for the groundless conclusions which philosophers attempt to foist upon mankind.

Another source of misunderstanding arises from the supposed opposition between science and philosophy. Modern science, with its positive methods and unquestionable results, we are told, stands in marked contrast to the un-

proved, and probably unprovable, findings of philosophy. The scientific mind cannot afford to dally with the more or less probable theories which attempt to explain the so-called realities which lie hidden behind phenomena when, in the laboratory, full and unquestionable evidence concerning the phenomena themselves is open to every investigator. In some circles, an attitude of contempt for philosophical speculation has been inherited from the positivistic ideas of the nineteenth century, as well as from the pride born of the great achievements of the special sciences, with the result that many to-day view philosophy as a land of fiction, and any effort therein as mere mental gymnastics.

Lastly, the supposedly impractical character of philosophy has turned many away from its study. Mankind is interested, above all things, in the satisfaction of daily needs. He must make a living and is, therefore, concerned about those things which will assist him in the attainment of that purpose, in the shortest possible time and with the exercise of the least amount of mental energy. To speculate about the origin, or the possible outcome of things, makes little or no appeal to the man in the street. What he desires primarily are principles which can, without difficulty, be translated into the terms of everyday life. For these reasons, the ordinary man is apt to grow impatient with a study which has no readily perceptible bearings on his daily life, habits, or happiness.

These opinions, so widespread to-day, arise from a false or narrow view of the true rôle of philosophy. Correctly understood, philosophy has a very definite function to perform in the field of both human knowledge and human endeavor. While its language is technical and oftentimes not easy for the uninitiated to grasp, the principles and the results of philosophical speculation are clear-cut and not difficult to comprehend. Philosophy does not busy itself

with shadowy speculations, except for the man who comes unprepared to take it up and grapple with its problems. The same objection might be leveled against any of the more abstract sciences which require quite as much and as serious preparation, on the part of the student, as philosophy. While it is true that the history of philosophy appears at first glance but the record of disagreements amongst philosophers themselves, underlying these apparent contradictions and rival systems, there is a unity of truth which mankind accepts and holds to, despite the fluctuations of philosophical thought. "The truth Pythagoras, Plato and Aristotle sought after, is the same that Augustine and Aquinas pursued. So far as it is developed in history, truth is the daughter of time; so far as it bears within itself a content independent of time, and therefore of history, it is the daughter of eternity." [1]

The false attitude towards philosophy which characterizes so many positivistic scientists is far more difficult to explain, and next to impossible to overcome. When we consider that science, no less than philosophy, must deal with general ideas; that any science which would be more than a mere accumulation of unrelated facts, must hark back to the despised first principles of philosophy as a foundation and justification for its researches, it becomes increasingly difficult to understand the aloofness of the average scientist to philosophy. This attitude of distrust is no doubt explainable on the ground that the "laboratory method" has begotten a mental impatience with the slow analysis characteristic of philosophic inquiry.

Moreover, in comparing philosophy with science, it is too often forgotten that philosophy is not a particularized science, nor should the methods of any special science be compared with the methods of philosophy. Philosophy is a

[1] Willman, *Geschichte des Idealismus*, II, p. 550.

"general" science. It is outside of, and above, not alongside of, and on an equal footing with a particular science; for example, biology, chemistry, or physics. It does not come "before," but "after" every particular science. The field of philosophy embraces the final facts which have resulted from scientific investigation in all branches of human knowledge. These facts are of such a character that they defy further analysis by the methods available to empirical science. They thus become the subject-matter of philosophy which attempts, by means of its synthesis of these facts, to answer the inevitable questions: What are they? Where do they come from? What do they mean?

To the objection that philosophy is impractical, we may reply that if by "practical" is meant the narrow view by which the unthinking man rules his daily life, then philosophy merits the note of impracticality. If man, on the other hand, is to govern his life by the highest rule of reason, if he is to live by truth and not by impulse, if his intellectual life is to control the urgings of the lower self, if he is to be guided not by custom, convention, nor imitation, but only by the highest and loftiest motives, then philosophy is not impractical. To make philosophy the guiding star of daily life has been the vision of every philosopher since Plato. And until mankind has learned to walk by reason, and not by instinct as the brute, little progress will be made towards the general acceptance of those vital principles of conduct which every "lover of wisdom" knows will alone insure the attainment of the highest possible ideals.

Many definitions of philosophy, all expressing the fundamental idea that it is a study of the "wholeness of things," have been formulated. No serious purpose would be attained by a mere recitation of them all. The leading thinkers, however, have been practically a unit on the elements of the definition which they have considered worthy of em-

phasis. Thus, Aristotle views philosophy as "concerned with first causes and principles." [1] Thomas Aquinas defines it as the "science which considers first and universal causes." [2] Practically all modern thinkers have accepted this formulation of the nature of philosophy. They have emphasized also its essentially synthetic character. The aim of philosophy is to inquire into the "wholeness of things," that is, things are studied apart from the narrow relations which make them either particular or temporary. No particular thing, but things; no individual phenomenon, but the universe as a whole; no temporary relation, but the eternal unchanging relations of things to one another and to the universe—this is the content of philosophy. And the mental attitude of the philosopher towards this "wholeness," or towards the universe, may be characterized as an attempt to comprehend it all and in its totality. Of course, this does not mean that the philosopher hopes to know the world as a whole, quantitatively. Such a venture is manifestly impossible. He can, however, gather together the scattered fragments of knowledge, the assumptions and principles which are common to all the sciences, bind them into an intelligible whole, and from this intellectual organization of the world of thought and of action, arrive at what the Germans so aptly call a "Welt und Lebensanschauung"—a world view and life view.

Explanation of the Definition of Philosophy.—Philosophy is defined by Thomas Aquinas as a *science*. Some objection would be made to the classification of philosophy as a science by those who have narrowed the conception of science to knowledge acquired solely by means of laboratory methods. While it is true that philosophy possesses a

[1] *Metaphysics*, I, 1.
[2] *In Metaphysic*, I, Sec. 2.

method which is peculiarly its own, and does not confine itself to the consideration of objects perceivable by the senses, nevertheless it deals with the knowledge of a very special class of objects for which it attempts to give a rational explanation. This knowledge of things and of their causes which results from philosophic analysis is clearly differentiated from the so-called knowledge which arises from hearsay, conjecture, and even from the acceptances of religious belief or historical testimony. The prime characteristic of philosophical knowledge, as of science, is its certainty. In giving the reasons for things, philosophy exhibits the essentially synthetic character of science. Therefore, it merits the name of science, or, at least, may be called "scientific." To separate philosophy from the sciences, and to deny it the right to be classed as a science, would be to negative the whole history of philosophic thought. This false attitude has come about as a direct consequence of the ever-increasing amount of specialization and narrowing of the field of investigation, which has been so prominent a feature of the progress of modern physical science. It is, however, wholly arbitrary, and can be accepted only by those who wish to place in jeopardy the proved results both of science and philosophy. "Philosophy cannot be separated from the sciences; it is simply the *sum-total of all scientific knowledge.*" [1]

The claim of philosophy to deal with reality, under the aspect of wholeness, justifies its right to acceptance by us as a science. The great difference between it and any special science lies in the fact that philosophy pushes its investigations further back than does a particular science. Each science deals with only a very circumscribed part of the discernible universe. It stops short of explaining the very assumptions upon which its own conclusions are

[1] Paulsen, *Introduction to Philosophy*, Tr. Thilly, p. 19.

founded, to say nothing of the nature and validity of these conclusions. Philosophy, on the other hand, examines these assumptions and conclusions, analyzes them, and arrives at the truth or falsehood of the data submitted by the special sciences. From the cross sections of truth as conveyed to it by physics, biology, and chemistry, it endeavors to reconstruct a complete system of knowledge. Not only is it a science, therefore, but it is the "science of sciences"; it is the sum-total of our knowledge of the universe as a whole.

This description of the rôle which philosophy has to play in the scheme of human knowledge would be unfair were it not admitted that philosophy depends upon science for the material from which it constructs its generalizations. The accepted conclusions of every science form the groundwork of all philosophic speculation. Upon these it builds its superstructure of generalized conceptions. From the manifold manifestations of being, as revealed to us by the theories and laws of natural science, philosophy extracts the inner core of reality. It is not concerned with the law of gravitation, or the functioning of the brain, or the facts which demonstrate the law of chemical affinity, viewed in their particular relations to any given set of natural phenomena. The truth or falsehood of these laws, however, is of grave concern to the philosopher in as far as either will affect his synthesis of reality, viewed in its entirety. For these reasons, philosophy should be keenly alive to every advance in scientific knowledge as bearing on the validity of the thought constructions which it has formulated.

It would be false, however, to conclude from what has been said that philosophy is but an auxiliary to science, or that it depends so exclusively upon the tested findings of science as to be unable to make progress independent of the development of the special sciences. Philosophy has a

position of its own in the hierarchy of knowledge. History proves that previous to the rise of empirical science it had furnished an adequate explanation of the universe which the findings of scientific investigation in later times have confirmed. To make of philosophy, therefore, but a branch, and that an insignificant one, of science would be to misconceive the nature of philosophy. Philosophy possesses besides individuality, its own special field of investigation, its own special methods, its own structure of laws and principles which stand to the facts studied in the strict relation of causality. "Philosophy therefore," writes Ladd, "should not be defined solely by stating its relation of dependence upon the particular sciences. This would involve too wide a departure from the historical point of view. Philosophy was cultivated, and the most essential factors of its right conception recognized, for centuries before its relation to the particular sciences was clearly discerned." [1]

The second part of the definition states that philosophy is the science which considers *first and most general causes*. Philosophy embraces all things, but it is evident that this cannot be accepted in a quantitative sense. It investigates all things, but only in their first causes. The proper object of philosophy, therefore, is the consideration of all things in their simplest, most complete, and most final elements. The very essence of knowledge consists in perceiving the causes of phenomena. We know a thing when we know why it is, what it is, and how it acts. In other words, to know the cause of something is to know why the thing exists. Now, causes are of different kinds. Some are proximate or remote; others, final or last. To know the final or last causes, to know why things are what they are, is the endeavor of philosophy. The burden of philosophy is to reply to the

[1] *Introduction to Philosophy*, p. 26.

ultimate why of all reality, to give the last answer to the problems of what the universe is and why it exists.[1]

The proper function of philosophy may be better understood if we point out the different attitude which it takes towards the study of the universe from that of science. Science, no less than philosophy, deals with causes. But science confines its investigations to the immediate causes of a particular series of phenomena, while philosophy disregards the proximate and concentrates on the ultimate reasons for all phenomena. Science is knowledge of a part of nature; philosophy is knowledge of the whole. For example, biology studies living organisms, their habits, functions, history, and organization. It collects all the data possible to serve as an explanation of why living things act in one way and not in another. It is satisfied if it can discover the causes which will explain why any organism functions in the peculiar way it has been observed to function. But biology, as an experimental science, does not investigate the nature of life itself; neither does it offer an explanation of the differences between living and non-living things; much less does it discuss what is the real nature of the living things it has under observation. This is the task of philosophy which sees in living animals not the individual but the universal type, and endeavors to explain this type, not in terms of any particular functioning it may possess, but in its relations to reality as a whole.

Not only is the field of each special science more narrow than that of philosophy, but its approach to the problems which come before it for investigation is of a temporal as distinguished from the final and definitive point of view of philosophy. The results of scientific study, because of their dominantly practical nature, fail to satisfy completely the inquiring mind of the philosopher whose interest in them

[1] Mercier, *Metaphysique Générale*, 5th ed., pp. 527 et seq.

transcends the particularities of here and now. Unless he can perceive things in their "whole" relations, he feels that his knowledge is inadequate. This inadequacy creates a void which can never be filled by the findings of science, no matter how searching or how final they may appear to be.

To discover the ultimate causes of things necessitates beforehand the asking of questions which are themselves final. It is the replies given to such ultimate questions which constitute philosophy. Human thought, from the earliest times, has been deeply interested in these problems, and universal recognition has been accorded to the importance of the answers given to what might be called the problems of philosophy. Merely to name some of the more fundamental problems will demonstrate the supreme value which mankind has always placed on the efforts of philosophers to advance solutions which could be generally accepted. Man, of course, has been, and is, most interested in himself. It is not surprising, therefore, to learn that a vast amount of philosophizing has revolved about the question of his origin, his destiny, his relations to other men, to nature, and to God. Human conduct and its sanctions have occupied also a prominent place in his thoughts. What is the world? Is it real, or mere appearance? Is reality one or plural? What is truth, and how is it distinguished from falsehood? Can we really know anything at all? Does God exist? If so, is He a person or must He be confused with the universe itself?

These, and many others, are some of the problems to which philosophy offers a reasoned answer. The mere recital of them should convince us that their solution lies far outside the realm of any special science. Without any intention of disparaging the value of the knowledge which has come to us through science, it may be asserted safely that, in the absence of all philosophy, our knowledge would

present a fragmentary, heterogeneous character, full of wide gaps and unexplained lacunæ, miles removed from the massive solid appearance which it manifests to-day. It would be a knowledge of facts, not of causes; it would lack the synthetic fulness which philosophy alone can give to reality, conceived "*sub specie æternitatis.*" Professor Dewey well described the note of finality in philosophy when he stated that "philosophy cannot be defined simply from the side of subject-matter. For this reason, the definition of such conceptions as generality, totality, and ultimateness is most readily reached from the side of the disposition toward the world which they connote. In any literal and quantitative sense, these terms do not apply to the subject-matter of knowledge, for completeness and finality are out of the question. The very nature of experience as an ongoing, changing process forbids. In a less rigid sense, they apply to *science* rather than to philosophy. For obviously it is to mathematics, physics, chemistry, biology, anthropology, history, etc., that one must go, not to philosophy, to find out the facts of the world. It is for the sciences to say what generalizations are tenable about the world and what they specifically are. But when we ask what *sort* of permanent disposition of action toward the world the scientific disclosures exact of us we are raising a philosophic question." [1]

The Divisions of Philosophy.—A general division of the philosophical sciences which will be universally acceptable is no less difficult to frame than a definition which all will receive. Historically, the division formulated by Aristotle has had the most influence on human thought. It was undoubtedly an outgrowth of his definition of philosophy, and reflects the realistic attitude of this great thinker.

[1] *Democracy and Education*, p. 379.

Thomas Aquinas justified the Aristotelian division by analyzing the different kinds of cosmic order which are presented to the philosopher's consideration. This order is fundamentally of two kinds—one which exists independent of our minds; the other which is created by the mind. The first is the order of nature, which was not made by man, but which he can study, or *speculate* about. The second is of man's creation, the work of his intellect and of his will, or of his actions. This is the practical order. From which he concludes that the study of philosophy involves two distinct fields, the speculative and the practical, and therefore should be divided into two main divisions—namely, *theoretical philosophy* and *practical philosophy*.

Subdivisions of Theoretical Philosophy.—Since the function of philosophy is to study things in their totality, it is evident that no science which confines its researches to particularized conclusions merits a place under the heading "theoretical philosophy." Philosophy deals only with general truths which come to us after reflection upon the conclusions of the special sciences. Now, the most fundamental and general facts in the universe which the human mind perceives have to do with such essential things as change, quantity, and being. These form the basis of the sciences of physics, mathematics, and metaphysics, and when viewed philosophically, that is, out of relation to any particular series of facts, constitute the subject-matter of philosophy or metaphysics as distinguished from the positive or inductive sciences. And Aristotle so viewed them.

By *Physics* he did not mean what to-day we call physics. His conception of Physics was essentially synthetic, and its field of operations he extended to the investigation of the most prominent and most universal characteristic of all

natural phenomena; that is, change. Translated into modern language, *Physics* would mean the Philosophy of Nature and Psychology. *Mathematics* to Aristotle did not connote the special mathematical sciences, like arithmetic, algebra, or geometry, but the larger aspects of quantity or extension, such as the axioms and postulates of mathematics, the problems of unity, multitude, plurality, etc. By *Metaphysics*, or "first philosophy," Aristotle understood the study of being in all its ramifications, and divorced from the limitations of both change and extension. In other words, metaphysics treats of the timeless thing, or subject, or principle, or cause abstracting from the restraining, limiting conditions of time and place, and therefore in its unchangeable and incorporeal manifestations. The modern philosopher would call this subject either by the name of Ontology or Epistemology, depending on whether the matter examined is one of pure being or one of knowledge; nor would he be inclined to accept without reservations the combining of being and knowledge under a single heading, or call it Metaphysics.

Subdivisions of Practical Philosophy.—All human actions result from either the operations of the intellect or of the will, and issue in certain activities which we organize, execute, and control. The study of the rules which guide the human mind in its own operations is called *Logic*. The content of Logic, therefore, has to do with the product of thought and the correctness of the processes by which we arrive at truth. Conception, judgment, reasoning, together with the method which guides us in using these processes systematically and in an orderly fashion make up the subject-matter of the science of Logic.

The functioning of the will produces human conduct, the guidance of which, according to the norms of right reason

and in conformity with man's ultimate end, forms the subject-matter for the consideration of *Ethics*. In formulating rules for the guidance of human acts, Ethics must determine not only what is right and wrong; it must also examine the motives which impel men to act, as well as the sanctions which are offered to justify their choice of one course of action above another.

Men not only reason correctly and act morally, but they likewise produce different kinds of works, as poetry, sculpture, music, etc. The study of the principles which should guide man in thus expressing himself is called *Esthetics*, or the Philosophy of the Beautiful.[1]

Modern philosophers have not accepted *in toto* the Aristotelian Division. They sought a new basis for making their divisions, some deriving the philosophical sciences with mathematical exactness from their own systems of philosophy, others founding their classifications on deductions from the "Absolute," which they held to be the ground of all reality. The general tendency, however, has been to divide philosophy into as many different branches as there are distinct problems to solve. While each one of these problems concerns but one or other aspect of the main problem of philosophy—that of reality—yet each possesses distinctive elements of differentiation from the central problem of metaphysics so as to insure it the honor of being accepted as a separate department of philosophy.

The classification most widely accepted was that of Christian von Wolff, which, made under the influence of the rationalism of the eighteenth century, separated philosophy altogether from science, conceiving it as a purely rational study. The Wolffian division of philosophy is as follows:

[1] For a more extended discussion of the Aristotelian Division of Philosophy, see Coffey, *Ontology or the Theory of Being*, pp. 7–23.

I. Logic

II. Speculative Philosophy
- General Metaphysics
- Special Metaphysics
  - Theodicy—the study of God
  - Cosmology—the study of the World
  - Psychology—the study of Man

III. Practical Philosophy
- Ethics
- Politics
- Economics

The tendency of contemporary philosophy, due principally to the ever-widening field of knowledge, and to the remarkable discoveries of science, especially of biology, has been to detach the philosophical disciplines from the main branches and to award to each one a certain amount of autonomy. Especially remarkable has been the number of subdivisions made in psychology, which has been broken up into a dozen or more subsidiary sciences, as epistemology, physiological psychology, psychiatry, social psychology, child psychology, genetic psychology, etc. A similar regrouping has taken place in logic and in ethics.

Many of the present-day sciences merit the name of philosophy only by sufferance, as, for example, the philosophy of history, of art, or of religion. It is true that these subjects obtain a great deal of their material from philosophy, and often are pursued in the philosophical spirit; they are not, for all that, distinct divisions of philosophy, but merely complex discussions based upon philosophy.[1]

The Methods of Philosophy.—By method in philosophy we understand the systematic means which the philosopher

[1] De Wulf in *Catholic Encyclopedia*, Article "Philosophy", Vol. XII, pp. 26, 27; Ladd, *Introduction to Philosophy*, pp. 162–177.

should use to attain truth. Each branch of knowledge possesses a method of arriving at the conclusions which it accepts. Mathematics has a method; biology and chemistry each have a method. While the problem of method is one of the most difficult of solution in any science, both from the theoretical and the practical point of view, the answer to it has generally come about from the growth of the study itself rather than from prolonged discussions as to what method should be adopted. There are thinkers, like William James, who scout the whole idea of philosophical method. "Philosophy, taken as something distinct from science or from practical affairs, follows no method peculiar to itself. All our thinking to-day has evolved gradually out of primitive human thought, and the only really important changes that have come over its manner (as distinguished from the matters in which it believes) are a great hesitancy in asserting its convictions, and the habit of seeking verifications for them wherever it can." [1] The history of philosophy, too, records the different, and often conflicting, paths which mankind has followed in the search for philosophical truth. At one period, the method most in vogue was the deductive; at another, the inductive method held sway. Modern philosophers have attempted a combination of both, but not always with happy results.

The three methods which have been most generally used in the search for philosophical truth have been the Experimental or Analytic, the Deductive or Synthetic a Priori, and the Analytico-Synthetic. [2]

The Experimental or Analytic Method.—The experimental or analytic method is an adaptation to the problems of philosophy of the methods used in the natural sciences.

[1] James, *Some Problems of Philosophy*, p. 15.
[2] De Wulf in *Catholic Encyclopedia*, Article "Philosophy", Vol. XII, pp. 29, 30.

It consists in the observation, accumulation, and verification of facts. All speculation or theorizing outside of or above observable fact is regarded as unscientific, and therefore incapable of producing truthful results.

The experimental method has characterized all the materialistic philosophers, ancient and modern. It had a great vogue in the last century due to the popularity of the Positivism of Comte, and to other thinkers deeply influenced by positivist ideas, like Mill, Huxley, and Spencer. Nor has its influence receded altogether. Many contemporary philosophers are anxious to apply the "laboratory methods," used so successfully in the special sciences, to the peculiar problems of philosophy. This attitude is based on a misconception of the real nature of the philosophical sciences, and has actually resulted in more harm than good. No one can deny that philosophy must know and accept the principles and proved conclusions of natural science; it must, also, conduct its investigations in conformity with the general methods in use in science, and according to what is known as the "scientific spirit"; but there is no need, in fact there is every reason to the contrary, to tie itself down to the technique, no matter how successful it has been, of any special science.[1]

The objections, which are leveled against the exclusive use of the inductive method in philosophy, are no less convincing than they are valid. By confining his study to observable phenomena, and disregarding all causality as it

[1] For a detailed and trenchant criticism of the "Idol of scientific method" cf. Hoernlé, *Studies in Contemporary Metaphysics*, pp. 24–49. "Of experiment in the instrumentalist sense there is little in philosophy: of experiment in the adjusting of conflicting beliefs there is a great deal. There is a weighing of considerations, a trying out of alternatives, a mobilising of all the resources of one's experience and reflection, a feeling one's way from a distracted and unstable to a coherent and stable outlook. Experiment in this sense is one with 'dialectic,' with learning by experience, with the recasting and transforming of beliefs which mark the growing insight, as the thinker advances from haphazard and partial to orderly and inclusive reflection." Op. cit., p. 47.

affects these facts, the empiricist but half understands the very phenomena under consideration. Whether he wishes it or no, the philosopher must take cognizance of the totality of things. A method which ignores causality, as well as the other laws governing phenomena, is one-sided, open to error, and seriously unphilosophical.

We may add to this criticism of pure empiricism in philosophy another based on the essential relativity of the analytic method. For the experimentalist, facts alone are of value, but facts in themselves have no cognitive value nor are they of necessity bound together by any principles or laws possessing objective validity. Facts are but the instruments of thought, of practical value, but in no sense, as far as our knowledge can go, related to any underlying realities. Reality may exist, the Absolute may be conceivable, the laws of thought and being may possess validity, but scientific investigation in the positivist sense of the term, is powerless in the face of such problems. The empirical method is the negation, therefore, or, at best, a stumbling-block in the onward progress of human thought towards what is final, complete, and unchangeable truth.

The Deductive or Synthetic a Priori Method.—The Deductive method is the opposite of the Analytic. It proposes to deduce, or to descend, from a central simple truth, intuitively known, to a whole series of secondary truths, more complex than the original datum. Included in the first all-embracing principle is contained every truth which the philosopher must know. It is the task of the deductionist to discover this primitive idea, and from it, by a logical process of reasoning, to formulate the whole fabric of knowable truth. Some thinkers have conceived this Absolute to be God, others have called it Being.

Plato was a deductionist. Amongst modern thinkers,

Descartes, Spinoza, and Leibniz attempted in geometrical fashion to bind up all knowledge into a few simple axioms. The successors of Kant, and especially Hegel, are likewise to be classed as Synthetic a Priori thinkers. Starting from an intuition of Absolute Being, which they conceived, in pantheistic fashion, to be identical with God, they arrived at a metaphysics of reality which was contained in the Absolute, existed by virtue of the Absolute, and must eventually return to be absorbed again in the Absolute.

The principal criticism to which the Deductive method leaves itself open is that it makes no use of, in fact disparages, the vast treasures of information which have come to us as a direct result of our observation of the world and of man. This is a fatal objection. If philosophy is to arrive at the whole truth, its bounden duty is to leave no stone unturned in its pursuit of fact. Facts should precede, not follow upon, theories. And to assign causes anterior to an examination of the facts is to put the cart before the horse.

Facts, too, act as a wholesome check on our a priori and preconceived notions of reality. No small amount of the opprobrium which has been cast upon philosophy in the past, because of its alleged impractical and speculative character, has resulted from the manifest exaggerations of the followers of the Deductive method.

The Analytico-Synthetic Method.—This method is a combination of the Analytic and Synthetic, and is the only method not open to the serious objections brought against either of them taken separately. It is the natural method of thought itself, for it is by combined analysis and synthesis, induction and deduction, that we eventually reach indisputable truth. The great majority of philosophers, to say nothing of the great scientists, have been advocates of this method, and have used it constantly in

producing the wonderful syntheses of orderly and organized knowledge which they have given to the world. Even the professed experimentalists have not disdained to synthesize into metaphysical constructions the conclusions they revealed by patient analytical work.

The true method of philosophy must be, first of all, analytical. By reflecting critically on the assumptions of the particular sciences we arrive at a body of presuppositions which are common to all the sciences. The principles which lie at the basis of psychology are the selfsame principles upon which biology, chemistry, or physics have been reared. Psychology presupposes the existence of a psychologist, of a mind to study, of the law of causality. Biology presupposes the existence of a biologist, of living things, and of the law of cause and effect. Philosophy sifts, criticises, accepts, or rejects these common assumptions. It is then ready to proceed to a synthesis, to the construction of a system of thought which will both justify and explain, in terms of the widest possible generalization, the implications imbedded in human experience. It must not be forgotten, however, that philosophy builds upon something more than the mere presuppositions of science, even when justified by analysis. Centuries of thought, the wisdom which has resulted from the experience of the race, bring to the thinker valuable material from which, by a process of selection, he will sort out the pure gold from the alloy, to fashion a thing of marvelous beauty, truth pure and undefiled.

To the beginner in philosophy method is not so important as the spirit with which he approaches the study of its problems. There is no royal road to wisdom. Patience, coupled with humility, are the two most needed intellectual virtues for him who would follow in the footsteps of the world's sages. Disregard of the teachings of the past is

certain to hamper the novice in philosophy in his search for truth. The world indeed has not learned from the great thinkers of bygone ages everything that there is to be learned. Plato and Aristotle have a message for the present which only the proud and self-sufficient will disdain to hear. Moreover, to possess in goodly measure the trait of teachableness is the best possible preparation for one who expects to learn and to profit by his excursions into the field of what has been aptly called "the science of sciences." The man who comes with preconceived notions and set opinions closes the door of truth in his own face.

Discussion is the life breath of philosophy. To philosophize is to discuss, that is, to search out the reasons for things, to explain them, to accept or reject them after serious examination. For philosophical discussion to be profitable, however, certain rules must be observed. It is in the spirit of the following canons that every student should venture to discuss the problems of philosophy:

1. He must respect facts.
2. He must respect self-evident principles.
3. He must love truth.
4. He must acknowledge the claims and excellence of morality.[1]

The Value of Philosophy.—Many question the value of the study of philosophy principally because of its supposed impractical character.[2] So much emphasis has been placed by modern education on professional subjects, or on subjects which prepare one directly for a business career or a profession, that the value of philosophical studies has been greatly obscured in the minds of many college students.

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, 5th ed., p. 323.

[2] Fullerton, *Introduction to Philosophy*, pp. 263 et seq.; Russell, *The Problems of Philosophy*, pp. 237–250.

The tendency to devote as little time as possible to subjects like metaphysics, epistemology, and ethics has grown to such an alarming extent that the very future of the philosophical disciplines is menaced. No educational policy could have more disastrous results for our national culture than a weakening, with an eventual elimination from the curriculum of colleges and universities, of the courses given in pure philosophy.

Philosophy should have a place, no less important than the languages, mathematics, or physical science in the formation of every man. The breadth of view which results from an intimate contact with the great problems of philosophy would in itself justify the amount of time necessary to become acquainted with them. No man is so narrow as he who knows but one subject, no matter how intensively. Knowledge cannot be packed away into water-tight compartments of the mind and labeled science, economics, history. Knowledge is a whole, and the man who sees it as a whole, that is, "philosophically," sees every item truly and in its proper perspective. Not only does philosophy unify knowledge, but it criticises and evaluates the information derived from all other sources. To be freed from the prejudices of some one particular science, to rise above the conventions of a particular country, or even of a century, is a mental possession worth any price one may be called upon to pay for it.

Moreover, no man should be considered truly educated who is not acquainted with the best products of the human mind down the centuries. And the history of the best in human thought is the history of philosophical thinking. The end purpose of philosophy is to produce knowledge, and what knowledge is of more worth than that which deals with the most fundamental and far-reaching questions which have troubled mankind since the beginnings of history?

If it is of value to know the habits of the amœba, to be able to dissect a crayfish, or to trace the rise of industrialism in modern society, is it not of equal value to know what mankind has thought, and thinks, of the problems of matter and mind, of the origin and validity of knowledge, or of the meaning and purpose of human life? To know Newton, Pasteur, Helmholtz and to be ignorant of Plato, Aristotle, Thomas Aquinas, and Kant, is to be acquainted with but a part, and that a very insignificant one, of the great spiritual influences which have moulded our civilization and made it what it is to-day.

Philosophy, too, exerts a very beneficial effect on the individual who seriously contemplates its problems. What man has not sought for the answers to the great questions which have troubled the human mind since its very origin? Who has not asked himself, Who am I? Why am I here? Whither am I going? Our minds seek certainty, freedom from doubts, a stable guide to action. It is true that every man has a "philosophy of life," although he may be quite unconscious of the possession. There is a difference, however, between the philosophy of the uneducated and that of him who has, under the guidance of the great thinkers of the past, thought out for himself a reasoned rule of action. The philosopher walks by the light of the best thoughts of the race. His mind has been clarified, his will strengthened, his motives purified, for he has sounded the reasons of things. To know the causes of things, is to go to the very source of all light.

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CHAPTER II

THE PROBLEM OF THE ONE AND THE MANY

The Problem.—At the very outset, it is only fair to impress upon the student that the problems of philosophy are of so intricate a character that they cannot be stated always in such clear-cut fashion so that each one forms a distinct question in itself, to which an equally distinct and separate reply can be given. While there are indeed many problems of a most fundamental kind, yet each one of these has relations more or less intimate with other problems, so that a complete answer often entails a reply to questions raised in a totally different field of philosophy. For example, we cannot discuss the central problem of metaphysics, namely, that of the one and the many, without glancing at the same time at the problems of psychology and of epistemology. If the universe is one, it follows that it must be either a materialistic or a spiritualistic universe and if so, all reality, including man, must be either matter or spirit. Likewise, the theory of knowledge which we accept will color our views of the nature of reality, for if consciousness can only know its own states, then, at least as far as knowledge goes, the only universe which exists must be a product of the mind. In philosophy one central problem always leads to another, with the result that it is often of the utmost importance not only to solve correctly a specific question, but to keep constantly before our minds the possible bearings of every solution upon other closely related domains of thought.

Supposing, therefore, for the time being, that we can know that a world external to our minds really exists, the question spontaneously arises as to the nature of this reality. From everyday observation, no less than from the knowledge we have gathered from science, it is apparent that the world in which we exist is made up of many things. But are these so-called things essentially different from one another, and is it not possible to resolve them all, with their manifold differences, into two or three fundamental forms of reality, or even possibly, into one, in which they all agree despite apparent differences? There can be no doubt of the fact that the human mind naturally tries to combine the scattered fragments of its knowledge of real existences into some sort of unity. This process of simplification and unification is going on constantly. The very term "universe" designates an attempt to understand the manifold and fragmentary experiences of everyday life in terms of unity.

Now, on the surface, reality is not only manifold, it is incapable of being expressed in any sort of unity. For the untutored mind, there are as many different kinds of reality as there are seemingly different kinds of things. To the philosopher, however, the task of bringing order out of the apparent chaos of our ordinary experience is not hopeless. Behind all the differences, startling and arresting as undoubtedly they are, he beholds likenesses. Although things are separated from one another, he can perceive them together; and the resemblances of things, while not as apparent, are, after some study, as striking as the differences which divide them. The thinker, therefore, asks himself: Is reality, the totality of human experience, the universe, the cosmos, all things, at bottom but one thing or must we believe that many things exist, so different from one another that the resolution of them all into some sort

of unity is impossible? In other words, is the world one or is it many?

The school of Philosophy which answers that there is but one reality, and that an all-inclusive one, is called *Monism* or *Singularism*. Those who believe that reality is made up of many distinct beings, irreducible to any further unity, form the school of philosophical *Dualism* or *Pluralism*.

Monism.—*Monism* is the doctrine which believes that all reality can be expressed in unitary terms. It is one of the fundamental points of view in philosophy, and has had defenders since the very beginning of the history of thought up to our own times. Many philosophers to-day are monists. They differ from their predecessors in this, that the tendency of contemporary Monism is frankly materialistic and evolutionary. Free Thought of a very radical type seems to be the controlling spirit of this school.

The older systems of Monism were frequently spiritualistic, believing that all reality is but an aspect of mind, and ultimately resolvable into the Supreme Being, God. This form of Monism is both idealistic and pantheistic, and numbers amongst its more prominent defenders the ancient Hindu thinkers, Plotinus and the Neo-Platonists, and in modern philosophy, Spinoza, Schopenhauer, Bradley, and Royce.

Because Monism ranks as a system of philosophy, and is therefore something more than a mere theory, it is apparent that for every problem it has a solution to offer in line with its primary belief as to the oneness of all things. It will be necessary, therefore, to return to the monistic philosophy again and again in subsequent chapters, especially when treating of the nature of mind, of the value of

knowledge, and of the relations of religion to philosophy. Here we shall attempt to trace only the main outlines of Monism, as it has appeared in metaphysics.

Metaphysical Monism.—To the question, how many things there are in the universe, Monism replies that there is but one, and this one is God. Sense experience would lead us to believe that reality is manifold, but the senses are not to be trusted. The many is an illusion. There is no distinctness or separateness in the universe, but only an illusory plurality. To judge things by what they appear to be is to be deceived. Neither do things change. The supposed action of one thing on another is likewise an illusion. The only existence is God, who is immutable, eternal, all-inclusive. The so-called "real things" of this so-called real world are at best outer aspects of the one reality. God is all, and all is God. This view is also called Pantheism.

The Monism of Spinoza.—Spinoza is probably the best representative of the idealistic and spiritualistic type of Monism in modern philosophy. His philosophy is *Pantheism* in its purest form. According to Spinoza, the temporary and finite is but an expression of the eternal and infinite. God is the one-all, for the reason that He is the only substance. Now the very essence of a substance is infinity. Spinoza proves the proposition that "every substance is necessarily infinite" by the following argument: "There does not exist more than one substance with a given attribute, and it belongs to the nature of that one to exist. It must, therefore, belong to its nature to exist either as finite or as infinite. But not as finite. For it would have to be limited by another of the same nature, and this, also, would necessarily have to exist. There would, then, be

two substances with the same attribute, which is absurd. It therefore exists as infinite." [1] The argument of Spinoza stands or falls with his idea of substance, which he defines as follows: "By *substance* I mean that which is in itself, and is conceived by means of itself: that is, that the conception of which does not need to be formed from the conception of any other thing."[2] This definition of substance is, of course, a patent ambiguity, for the only substance which exists of itself, and in itself, is the necessary being, God. To use the word "substance" in the Spinozean conception of the term is to change its whole meaning, and to cause, as Spinoza actually did cause, confusion and disorder in philosophic thought.[3]

God, in this view, is not only the life of the world, or a world soul, He actually is the world. Everything comes from Him, and depends upon His divine nature. Nature, in the sense of this world and all that it contains, is thus caught up in God who expresses Himself by means of His two attributes of thought and extension, which do not, however, constitute two separate beings. In a universe in which there exists but a single being, and that infinite, it is useless to look for marks which would distinguish substances from one another.

It need scarcely be pointed out that the pantheism of Spinoza, only the one-God exists, is not to be confounded with monotheism which holds that one God alone exists. While monotheism believes that the divine nature itself demands of necessity that God be eternal, unchangeable, and omnipresent, it does not, on the other hand, deny reality to things outside of God. These things both exist, separate from the existence of God, and act as primary

[1] *The Philosophy of Spinoza*, Trans. Fullerton, p. 29.

[2] Spinoza, op. cit., p. 25.

[3] For a discussion of the true meaning of substance, and a critique of false ideas concerning the same, see Coffey, *Ontology*, pp. 207 et seq.

agents, to a certain extent independent of the acts of God. Thought is an attribute of the Deity, but extension is an attribute of matter alone. Matter and mind, or the world and God, are therefore not to be confused as they are in the system of Spinoza. [1]

The Monism of Hegel.—Another form of Monism in which the pantheistic trend is not so prominently displayed, but which is of a no less spiritualistic type than the theory of Spinoza, is the Idealistic Monism of Hegel. It has been called *logical* pantheism to distinguish it from *metaphysical* pantheism, for the reason that the world is not viewed so much as one with God (as a matter of fact, God, the infinite and absolute, does not exist except as the terminus of our realization of the wholeness of things) but as a world unfolding, according to the laws of logical necessity, the ideal content of reality. The universe is a whole or a unit which, through the ages, has evolved into a multitude of forms, each one of which is the partial expression in self-consciousness of the Absolute.

This philosophy of Hegel is known variously as Logical or Objective Idealism, Idealistic Monism, or the Philosophy of the Absolute. According to Hegel, there is no reality outside our thoughts. Experience, or consciousness, alone justifies us in asserting that a thing exists. Therefore, for a thing to exist it must first be thought. All knowledge is built up by a uniting of individual experience with the universal truth, or Idea, which Idea is not an abstraction, but a real whole, organically existing. This whole alone is true. Things possess truth only in as far as they reflect the nature of this whole in the process of its unfolding. "The True is the Whole," writes Hegel. "The whole,

[1] For a complete discussion of Pantheism vs. Theism see Ward, *The Philosophy of Theism*.

however, is only the essence perfecting itself through its development. It must be said of the Absolute that it is essentially result, that only at the end is it what it is in truth. And herein consists its real nature—in being the Actual, Subject, or Self-developing Principle."[1]

The individual exists, but only as an aspect of the whole. The only real universal is the divine Idea which embodies in itself the totality of things and determines their relations both to itself and to one another. The divine Idea is the world of the Absolute Self. Nor is this universe a mere abstraction of the mind. It is an organic thing, which includes all particular things, each one of which is but a faint expression of the whole, but all of which, taken together, notwithstanding the fact that they are but finites, constitute the Absolute Idea. Likewise, it is numerically one with all the finites which its thinking covers. It is thus that Hegel attempts to explain the relations between the finite and infinite, as well as between the mind and reality, which he holds to be one. [2]

[1] *Phenomenology of Mind*, p. 14.

[2] Royce, in *The Spirit of Modern Philosophy*, p. 225, has stated the doctrine of Hegel in the following terms: "One could not mention a formula more characteristic of the Hegelian doctrine than this account of what Hegel calls the 'concrete universal,' which constructs, brings forth, in the endless play and toil of rationality, its own 'differences,' the individuals of the world of experience. It is this which for him explains how in the church or in the state we, the individuals, find ourselves 'members one of another.' It is this that shows us the whole world as an organism. Wherever this sort of universality is *not* found, as is the case in the world of uncomprehended sense-facts, where, for instance, only *men* as individuals seem to exist, and *man* appears to us as a dead abstraction, we are *not* dealing with the world of truth. The first sign that we are dealing with the truth itself is our success in discovering an organic connection amongst things. For organism is selfhood or personality viewed in its outward manifestation. There is, then, for Hegel a lower form of thinking that reaches only a *Verstandes-Allgemeinheit*. Such thinking finds itself in the presence of individual facts, and regards the universal either as a bare abstraction, or else as present only in each individual as its inner and separate nature. For such thinking the only *concrete* truth is the world of individual things as such. But the deeper insight into the world is revealed to us through a reflection upon the nature of self-consciousness, wherein the universal, or self, is the organic total of the facts of consciousness, which exist not save as related to one another, and to this universal."

The great difference between the Monism of Spinoza and that of Hegel lies in their different conceptions of the Absolute. For Spinoza, substance or God is essentially static, and only by an evident contradiction did he assign to it individuality and purposeful activity. On the other hand, the Hegelian Absolute, besides being the ground of all reality, is essentially dynamic, manifesting itself in all the countless ways in which this universe, man, social institutions, and the state, realize the truth which comprehends them all and alone makes them all intelligible.

Contemporary thinkers, like Bradley and Royce, have attempted to refine the thought of Hegel and to make more explicit his philosophy of the Absolute, particularly on the side of its contacts with man and his moral nature. Royce is very insistent in his interpretation of the Absolute as the self of selves, or even the person of persons, which is in the process of fulfilling completely all possible outcomes and meanings.

It should be noted that Monism of the idealistic type is on the wane at the present time. Not only in its pure form as Hegelianism, but also in the shape of Neo-Hegelianism, the doctrine of idealistic Monism has suffered a decided eclipse. The reaction away from Monism, led by such men as William James, has traveled very far along the road in the direction of an acceptance of both a realistic and pluralistic universe. Spiritualistic Monism has had its day, and in the face of the terrific onslaughts which it is experiencing from the side of modern realism, it can be asserted safely that there is little chance of a successful revival of monistic thinking, at least in our day.

Materialistic Monism.—*Materialistic Monism* is the direct opposite of Idealistic Monism, and asserts that all reality is but matter. What we call mind is matter in

motion. The essential attributes of matter are extension and impenetrability, and its primary activity is motion. These principles explain all reality, and there is no necessity of calling into existence such things as souls, states of consciousness, or even God, to make clear the nature of what real things are.

This form of Monism is to be identified with what is ordinarily known as Materialism. As a metaphysical doctrine, Materialism, at least of the crude type, has never occupied a strong place in the hierarchy of philosophical systems. Amongst the Greeks the Ionian school was materialistic, and amongst modern philosophers, Hobbes, Priestley, La Mettrie, and Büchner accepted the point of view of materialism.

Modern Materialism has spent most of its efforts in the fields of Cosmology and of Psychology, and especially in the latter, where many of its successes have been attained. For example, the physiological explanation of the nature of our psychical processes is purely a materialistic explanation. The theory of evolution gave for a time new life to materialism. In recent years, however, it has been almost completely submerged by the advance of spiritualistic thought, and is quite generally regarded now as a totally inadequate explanation of the universe. Metaphysical materialism has few, if any, followers at the present time. Those who do accept it, like the disciples of Haeckel, are almost a unit in repudiating the central doctrine of ancient materialism; namely, that reality as such is body. They confine themselves to a denial of the differences between body and mind, uniting both in a higher something distinct from either matter or spirit. Materialism to-day is more a tendency, a temper of the philosophic mind, than a system of philosophy, and numbers its adherents principally amongst the positivist scientists and the advocates of

radical thought, especially in matters of religion and of ethics.

Arguments in favor of Monism.—The arguments ordinarily advanced to justify metaphysical monism are the following:[1] That which is most general must be one. Particular or special ideas are all referable to a more general idea, and as there is, moreover, a perfect parallel between thought and existence, the most universal thought must be the most universal being. Therefore, the highest thought is but the expression of the highest being, which is one.

All causality is finally explainable only on the assumption that there exists an ultimate cause, which causes all things, but is itself causeless.

To exist is to be one. The being, therefore, which includes all existence must be one.

The best and most beautiful, since it is the superlative of its kind, must be one.

The above arguments, although stated in four different ways, are really but one argument, whose validity depends on our acceptance of the deductionist principle that the special is necessarily contained in the more general. But this is precisely the point at issue, and is a principle which all realists will deny or seriously call into question.[2] Because truth is simple ordinarily, it does not follow that universally the simple is more true than the complex. Very often the simple and the true are synonymous, and quite as often they are not. As a matter of fact, even

[1] Külpe, *Introduction to Philosophy*, p. 115.

[2] Perry, *Present Philosophical Tendencies*, p. 65, calls this the "error of psuedo-simplicity." "It consists in the failure to recognize the difference between the simplicity that precedes analysis, and the simplicity that is revealed by analysis; between the apparent simplicity of an analyzed complex, and the real simplicity of the ultimate terms of analysis; or between the simplicity that is owing to the little that one knows, and that which is owing to the much that one knows."

granting for the sake of argument the monistic contention, it still would remain true that the complex can never be fully explained in terms solely of the simple. Many distinct and separate things actually exist, and everyday observation convinces us of their existence. But it is assuredly no explanation of this manifold to deny the multiplicity of actual existences by affirming the metaphysical unity of all things.

Criticism of Monism.—The real difficulty in every form of monism or of singularism is its refusal to look at facts, and its support of an a priori theory which contradicts experience, at least as far as we are capable of knowing and appraising it. Change is one, if not the most prominent, characteristic of reality as experienced by us. Now, one does not explain this fundamental and all-embracing fact of human experience by explaining it away. If the Absolute be immutable and timeless, as it must be in any system of Monism, how does this Absolute unity combine in itself the multitude of real changes taking place at every minute of the day, not only in ourselves, in our feelings, thoughts, and desires, but in the things, living and non-living, which surround us? The failure to explain change is the fatal error of every form of monistic thought.

Another fact of experience which evidently escapes the attention of the monist is that of the real relations actually existing amongst things. So simple, evident, and universal is this fact of interaction that no assumption other than that of a universe which is, at least partially, both temporal and quantitative is sufficiently broad enough to comprehend the same. Real relations between the parts of an all-inclusive Absolute are unthinkable, for the very simple reason that the Absolute has no parts. In the dualistic conception, on the other hand, both mind and matter exist as distinct

for dualism

entities, preserving thereby the possibility of acting one upon the other.

Singularism implies a determinist philosophy which renders impossible any acceptance of freedom, especially for the human individual. If the Absolute alone exists, and man is but a necessary element of this perfect whole, all his activities are predetermined by a necessary, complete, and eternal submission to the functioning of the whole. God alone really acts; the actions of men are determined by the plans of the Absolute, according to which we move, and live, and have our being without the slightest chance of selection or control on our part. This is a conception of human nature which is not only erroneous, but of no practical utility in ordinary life. Human society, and all human intercourse, are founded on the assumption of man's freedom. Not to recognize the freedom of man, as Monism fails to do, is to construct a universe full of logical contradictions and practical impossibilities.[1]

This conception is likewise in open conflict with the deeply rooted belief of every man that he is an individual self, who thinks, feels, and acts. I am not a mere part of an Absolute whole, a fragment of an all-inclusive one (at least I never think of myself as such), neither do I think of any other man other than as an individual self, possessing self-consciousness no less than myself. My whole experience is against the view which would submerge my own individuality, or that of another man, in the supreme Oneness of a higher, more universal individuality.

Finally, Monism, in its search for logical unity, very illogically passes from the world of mere thought to that of reality, falsely assuming that because our thoughts can be reduced to a unity, in the form of Absolute Idea, reality

[1] In this connection read the chapter "Absolute Idealism and Religion" in Perry, *Present Philosophical Tendencies*, especially pp. 188–192.

must be an identical outer expression of this inner Idea. This process is a reversal of the correct mode of reasoning. Thought should explain reality, not vice versa. No philosophy of the universe can hope to stand which fails to face facts as they exist, but prefers to torture and distort them on the Procrustean bed of its own a priori principles.

Many philosophers have accepted Monism for the reason that, urged on by the laudable desire to achieve unity, they saw in every form of Dualism the erection of an impasse against which the human mind revolts in its search for the truth. It is not open to doubt that the tendency to Monism has been marked throughout the whole history of philosophy, and the assumption of the unity of all reality has been, more or less an avowed postulate, especially of modern thought. But as Külpe remarks: "Reverence for unity, whether ethical, æsthetical or mystical, has nothing at all to do with a scientific metaphysic." [1]

There is a limit to the unifying process in human knowledge. The process of unification in ordinary experience, as well as in scientific knowledge, should and must continue, but there comes a point where to strive for a further and more elementary unity is to distort facts, and can only result in confusion of thought and in error. If the rational were coterminous with the real, then the possibility of some day arriving at a series of categories, or of one category, which would encompass all reality might be admitted. But Hegel has failed to prove the basis of his whole theory; namely, that only the rational is real. Until Monism can convince the philosophical world that this proposition is provable, the better part of prudence and of wisdom would seem to dictate an acceptance of Dualism, with all its lack of completeness, as the more logical working theory.

Dualism must protest, also, the insinuation against its

[1] *Introduction to Philosophy*, p. 116.

scientific character, which is given expression by many idealists, to the effect that dualism is not founded on sound arguments, but has arisen mainly as a protest against some exaggerated form or other of Monism. Ladd repeats this observation when he writes: "It is to be noted that Dualism arises—at least in modern times—almost altogether as a protest against some form of Monism, which is deemed extreme or dangerous." [1]

We venture to assert that it is not as a protest against Monism that Dualism exists to-day, and has attracted to its banner a great number of thinking men. Dualism is securely founded on facts, which rebel against the a priori explanations of the Idealists. The distinction between self and non-self, body and mind, matter and force, subject and object, good and evil, is of such universality, and of such cogency, that we must demand more than the tendency of the mind to achieve unity in thought before we can consent to destroy a series of differences so deeply rooted in nature, thought, and human life. Every thinker has an abiding sympathy with the efforts of those who search so diligently for the key which will unlock the treasures of the universe. But where shall that key be found? Assuredly, not in Monism. Ladd himself swears away the main strength of the monistic position when he cautions its followers against wiping out the dualistic distinctions which are so prominent a part of the nature of man and of the universe. "Forms of Monism, which virtually contradict the distinction between the reality, *me*, and the reality that is *not-me*, cannot succeed in preventing the persistent recurrence of rival dualistic schemes. Monism must so construct its tenets as to preserve, or, at least, as not to contradict and destroy the truths implicated in this distinction; otherwise, it cannot remain in possession of the rightful domain of philosophy.

[1] *Introduction to Philosophy*, p. 402.

But even more imperative, and far more difficult, is the task imposed upon Monism by those dualistic considerations which emerge on ethical grounds. To blur, or reduce, or deny, valid ethical distinctions is to furnish an elixir of life to an expiring Dualism; it is even to equip it with an all-conquering sword. No form of Monism can persistently maintain itself which erects its system upon the ruins of fundamental ethical principles and ideas." [1]

A detailed criticism of Materialistic Monism in its psychological implications will be given in the chapter on the psycho-physical problem. As far as the ontological aspects of materialism go, it is sufficient to note here that materialism stops short of the very problem under discussion by making all reality synonymous with matter. To call mind body, and to attempt an explanation of the processes of consciousness in the terms of physiology, is not to give an answer to the problem of reality, but rather to deny its existence. The task of metaphysics is not to define whether subject and object, ideal and real exist, but whether they are two distinct things, or are ultimately resolvable into a higher reality, which is not two but one.[2]

Dualism.—The term Dualism, like so many other terms in philosophy, does not bear a constant meaning throughout the history of thought. It is employed in different meanings by different schools. In general, however, it designates a system of philosophy which, in contrast to Monism, believes that reality is dual; that is to say, that in the ultimate analysis of being we will arrive at two principles, one material and the other, spiritual. These two principles are so essentially different from each other that any further

[1] *Introduction to Philosophy*, p. 404; James, *A Pluralistic Universe*, passim, for a criticism of the different forms of Monism; also James, *Some Problems of Philosophy*, pp. 135 et seq.

[2] Turner in *Catholic Encyclopedia*, Article "Monism," Vol. X, pp. 483–487.

reduction of them into a more fundamental kind of unity is impossible.

Naïve Dualism.—Dualism is used to designate widely different schools of thought. In the first place, there is *Naïve Dualism*, which holds that bodies alone really exist, although alongside of and often dominating them there are spirits, possessing a secondary kind of reality, which influence the bodies as efficient forces, and continue to exist, when separated from them, in the guise of ghosts or departed spirits. This was the view of primitive thought, as well as of primitive religion, especially in the East. To-day, although the plain man has rejected the manifest absurdities contained in this religious-popular conception of reality, he remains a dualist in the sense that he rejects the oneness of all things, and believes that body and mind are two distinct realities, operating on each other in a way that is beyond understanding.

The Dualism of Aristotle.—Philosophical Dualism is a product of the Aristotelian thought, and is often called *Common-sense Dualism*, for the reason that it acknowledges the distinction between mind and body, or, better, between physical and psychical phenomena, a distinction which our everyday experience commits us to. Dualism, however, is compounded of something more than the facts which are apparent to every thinking man, and are given to us in daily contact with one another and with the world; nor does it accept these facts until, after a full and complete criticism of their validity, it has been proved beyond a doubt that they are real. It is this critical attitude which Dualism assumes towards the acceptances of common sense that justifies its claim to be considered a philosophy in the most rigid sense of the term.

Dualism believes in the reality of an extra-mental world despite the fact that sense perception can be shown to err in many of its deliverances or, that the influence of the mental is oftentimes very great in our constructions of the external world, elaborated from the data of sense experience. Dualism, therefore, is something more than a "protest" against Monism. It is a reasoned philosophy of nature, thoroughly consonant with accepted facts as we know them.

The fundamental doctrine of ontological Dualism is that the distinction between mind and body, subject and object, cannot be broken down. This distinction is final and absolute. Body possesses extension, and exists in time. The mind is unextended, and also exists in time. Mental states, no less than bodily states, are subject to change. Both temporal and quantitative elements are inherent in the very nature of reality as we know it and as it exists, with the exception of the mind, which is unextended or spiritual. The difference between body and mind is, therefore, a difference not only of degree, but of kind. The universe contains both types of being. While it is true that one kind of being can and does act upon the other (the manner of this interaction is a special problem in itself) mind and matter are not to be confused as inner or outer aspects of one underlying ground of reality, but must be kept separate and distinct as two fundamental principles of nature.

Aristotle and Thomas Aquinas were philosophical dualists, and their dualism influenced deeply the other parts of their philosophy, especially their psychology, epistemology, and ethics. Contemporary thinkers are returning in great numbers to the above-stated view. There are undoubtedly great differences to be noted between the ancient or mediæval dualists and modern dualism; the

fundamental distinction, however, between the material and spiritual is accepted by both schools. This form of Dualism is quite different from the extreme Dualism of Descartes, a system of philosophy which has had the most widespread and serious consequences in modern philosophy.

The Extreme Dualism of Descartes.—In the philosophy of Descartes, the difference between mind and body was regarded as so wide that by no possibility could either one act in any effective way upon the other. In the case of man, a feeble kind of interaction, of a purely mechanical nature, is acknowledged, evidently a concession on the part of Descartes to popular opinion. The mind was a thinking subject, a "res cogitans." Thought was of its very essence. The mind was therefore an immaterial, unextended, self-acting principle.[1]

Having determined thus the nature of mind, he contrasts it with the body, or matter, which is extended a "res extensa," composed of parts, and possessing motion by reason of its weight or the impact of its constituent atoms upon one another. There are, therefore, in this world two distinct substances, one spiritual and the other material. The body is a machine, and the soul stands to it much in the relation of a pilot to the boat which he guides. Animals likewise are mere machines. It is the possession of a soul which raises the human individual above the level of the automaton.

The founder of modern Dualism influenced philosophic thought very extensively. From the extreme doctrine of Descartes regarding the body and mind came in one

[1] Descartes, *Meditations*, II, Trans. Veith: "But, what, then, am I? A thinking thing (res cogitans) it has been said. But what is a thinking thing? It is a thing that doubts, understands, conceives, affirms, denies, wills, refuses, that imagines also and perceives."

stream the Occasionalism of Malebranche, and, in another, the Idealism of Locke, Berkeley, Hume, and Kant. The Cartesian doctrine of the human body as a machine gave rise to the various theories of Mechanism which have proved so marked a characteristic of recent psychology. It must be remembered always that Descartes was first of all a *psychologist*, and that both the basis and outlook of his philosophy were psychological. By a natural process of reasoning his dualistic psychology formed the groundwork for a metaphysical dualism. It is thus that Descartes left to us what has been so justly called his "luckless legacy" of two substances, matter and spirit, which are by their very nature antithetical, the gap between which can never be bridged.[1]

Arguments in Favor of Dualism.—It is often asserted that thought can find no justification for Dualism on general grounds, and that any strength which the dualistic position possesses arises as a direct result of its opposition to Monism. No statement could be further from the truth. Dualism can be proved by legitimate reasons which stand the severest tests of everyday observation and need no a priori generalizations to bolster up their worth.

In the first place, our belief in the existence of other people's minds is a rational inference from our belief in the existence of their bodies, for it is only by the operations of the body that the presence of a mind is revealed. If we cannot be sure of the existence of other people's minds, neither can we be sure of the existence of their bodies. But to deny the existence of the external world is to end in

[1] See Mercier, *The Origins of Contemporary Psychology*, trans. by W. H. Mitchell, for a very complete analysis of the influence of the Cartesian system upon the development of modern psychology.

See Perry, *Present Philosophical Tendencies*, pp. 122–124, for the arguments advanced by Berkeley against the Dualism of Descartes, from the point of view of Idealism.

Solipsism, a theory which renders impossible the existence of any kind of reality outside the thinker's mind. Nothing in human experience justifies the acceptance of such a radical position. In fact, everything points to the reality of both our own bodies and minds, as well as of those of other people.

Physical science assumes the reality of the existence of matter. And this assumption has been proved to be true again and again by the results obtained through a multitude of scientific observations carried on at different times and places, and by a multitude of different scientists who could have no valid purpose in asserting that they dealt with realities, if such were not the case. If sound, light, heat, and electricity are not real things, what then is physics or chemistry? Modern science, at least on its experimental side, stands fixed irrevocably against a belief in any form of Monism.

And what is true of the physical sciences is doubly so of the physiological and psychological. If the world is but a collection of mental states, it seems to be an extravagantly absurd thing to write of the influence of the brain centers upon our processes of memory, or to trace the physiological influences which so radically affect the growth and development of sensation. If any more cogent general reason is needed for a belief in dualism than that, without it, the foundations of science being false, the whole superstructure which it has so laboriously erected, would crumble to the ground, then it must be sought for outside the ordinary realms of human experience. Every instinct, every tendency in man's intellectual makeup insistently calls out for an acknowledgment of the reality of body and mind. As Bertrand Russell has so well said, "Every principle of simplicity urges us to adopt the natural view, that there really are objects other than ourselves and our sense-data

which have an existence not dependent upon our perceiving them." [1]

Criticism of Dualism.—The objections generally brought against Dualism do not distinguish clearly between the various forms in which this theory has appeared. That naïve, and even extreme Dualism, are open to very serious, some would say unanswerable, arguments against their validity, can scarcely be questioned. The Cartesian theory, in particular, built as it is upon a false notion of substance, cannot stand up under a severe critical examination. Philosophical or scientific Dualism, on the other hand, is better grounded, and is more than able to take care of itself in the presence of objections from the side of Monism, either spiritualistic or materialistic.

The first, and most usual, difficulty brought against Dualism is that it fails to explain how two principles, the one extended and the other unextended, can act upon each other. Such interaction seems not only impossible, but even inconceivable. To which we might reply, that a fact is one thing and the explanation of it quite another. That the problem of interaction between body and mind does not present insuperable difficulties, and can be explained to a satisfactory degree, will be brought out in detail in the chapter on the psycho-physical problem. Suffice it to say here, even granting that no satisfactory explanation of interaction is at hand, we may not logically conclude that the fact of the existence of two distinct entities, body

[1] *The Problems of Philosophy*, p. 37, cf. also op. cit. p. 39: "Philosophy should show us the hierarchy of our instinctive beliefs, beginning with those we hold most strongly, and presenting each as much isolated and as free from irrelevant additions as possible. It should take care to show that, in the form in which they are finally set forth, our instinctive beliefs do not clash, but form a harmonious system. There can never be any reason for rejecting one instinctive belief except that it clashes with others; thus, if they are found to harmonize, the whole system becomes worthy of acceptance."

and mind, is thereby rendered doubtful, even impossible. Conceivability or inconceivability should not be the final motive to guide a philosopher in his acceptance of facts.

Another objection is raised on the ground that any interaction of body on mind, or conversely, would upset the law of the conservation of energy.[1] A complete answer to this objection will be given when we treat the question of psychological Monism. It may not be amiss to recall here that many eminent physicists do not look upon the law of the conservation of energy as applicable to living organisms. Certainly, it has never been proved to hold good for the universe as a whole. Until this is done, it can be asserted safely that the interaction of mind on body does not increase the quantity of energy in the world, and, therefore, such interaction is not a violation of a fundamental law of nature.

A more serious difficulty for some minds would seem to be the utter impossibility of two processes, so radically different as the mental and physical, ever coming under the single law of cause and effect. To this, however, we would reply that if qualitative likeness is a necessary condition for the operation of the law of causality, then a rapprochement of any kind between the spiritual and material is evidently ruled out of question. But the causal law says nothing at all about the likeness or unlikeness of the processes which stand to each other in the relation of cause and effect. In the physical world, the law operates exclusively between material extended objects. But what logic forces us to deny the validity of the law when it is transferred to the interaction of disparate entities like the mind and the body? There is no justification, either in logic or in fact, for a narrowing of causality to purely phys-

[1] McDougall, *Body and Mind*, pp. 206 et seq. for a detailed reply to this objection as well as to the argument from "inconceivability"; also Maher, *Psychology*, pp. 517–524.

ical processes. It cannot be done without begging the whole question at issue. In this connection Külpe remarks, "As for mental phenomena themselves, no more objection is raised to their causal interaction than to that of physical processes. It is truly a strange rule that is based upon one single instance, and then held to be valid simply in order that this single instance may be brought under it." [1]

Metaphysical Dualism, therefore, while holding securely to the doctrine that reality is double, does so out of respect for facts which cannot be explained in any other way, without being explained away. The problems as to what matter is or what mind is, or how they can interact, bring up questions the replies to which should not, because of their supposed or real inadequacy, prejudice the student against the central truth of a dualistic ontology; namely, the existence of two distinct realities in this universe. At this time we are not contending for any further admission than acceptance of the reality of the dual principle in nature. Sympathetic with the aspirations of the monist for unity, the dualist feels that the process of unification goes forward altogether too quickly when it fails to take notice of facts, differences, and distinctions, which are fundamental both in thought and in being. To obtain intellectual unity at the expense of logic and experience is to pay too great a price for victory.[2]

Pluralism.—It is not easy to state, in a few sentences, the precise position of that school which is known as *Pluralism*, in regard to the problem of the one and the many. Most pluralists are what are known as pragmatists, and

[1] *Introduction to Philosophy*, p. 136.

[2] For the consequences of Dualism in the field of morality and religion, consult Professor Pratt, *Matter and Spirit*, pp. 197–230.

De Wulf in his *Philosophy and Civilization in the Middle Ages*, pp. 194 et seq. has a very fine exposition of the dualistic conception of the world current amongst the scholastic philosophers.

Pragmatism is a system of thought which is somewhat contemptuous of metaphysics, being primarily a theory of knowledge. In spite of the fact that Pragmatism looks upon metaphysics, in the words of Schiller as "a luxury," it nevertheless accepts a universe, or, better still, a "multiverse" which is in striking contrast to the universe of Monism. Pluralism is diametrically opposed to all forms of Monism by its denial that the world is a complete unity, or an organized systematic whole. Reality is not one but multiple, and is incapable of ever being reduced to anything approaching ontological unity. Pluralism has no sympathy with the efforts of monistic philosophers to resolve all things into a whole or into a one. Reality is a series of eaches, everys, anys, eithers. Each thing is so distinct from every other thing that it stands alone, forms a small universe in itself. Universals, generalizations, the world, the cosmos are mere words. [1]

The contrast between Monism and Pluralism is well put by James when he writes: "Pluralism stands for the distributive, Monism for the collective form of being." [2] But how are these distinct realities ever brought together? one naturally inquires. By an almost infinite number of connections founded on similarity, dissimilarity, oneness, difference, etc., things come together in our minds, without however in themselves forming parts of any kind of a real whole. Things are related to one another, there can be no doubt of that fact, but not in the sense of forming a unit with other things, not in any "all-relationship." James explains this type of union as the "strung-along type." "If the each-form be the eternal form of reality no less than it is the form of temporal appearance, we still have a coherent world, and not an incarnate incoherence, as is

[1] Marvin, *Introduction to Philosophy*, pp. 222 et seq. for an excellent statement of the different kinds of Pluralism.

[2] *Some Problems of Philosophy*, p. 114.

charged by so many absolutists. Our 'multiverse' still makes a 'universe'; for every part, though it may not be in actual or immediate connexion, is nevertheless in some possible or mediated connexion, with every other part however remote, through the fact that each part hangs together with its very next neighbors in inextricable interfusion. The type of union, it is true, is different here from the monistic type of *all-einheit*. It is not a universal co-implication, or integration of all things *durcheinander*. It is what I call the strung-along type, the type of continuity, contiguity, or concatenation." [1]

Pluralism, therefore, denies all possibility of ever approaching an all-inclusive unity. It supports the existence of a Deity who is an essence distinct from the Absolute, as well as from all other entities. However, God is not the Personal Deity of traditional Christian thought. He is, though, the ground and goal of finite persons, and a finite part of the finite universe itself. This is, indeed, a new form of Pantheism, if such doctrine is worthy to be dignified by the name of Pantheism.[2] Despite the fact that Pluralism vigorously opposes all forms of Monism, it is difficult to perceive how it escapes the main objection to Monism; namely, that at bottom all things are, somehow or other, one and the same. The possibility of ultimate oneness is not denied by James, though it is certainly now beyond anything which we have experienced. He, therefore, takes refuge from the dilemma in some form or other of Panpsychism.

Recent pluralists, Ward, Sorley, Howison, and especially A. Seth Pringle-Pattison, while acknowledging the existence of a material order, look on it rather as a foundation for the development of personality which will receive

[1] *A Pluralistic Universe*, p. 325.
[2] Wells, in *God, the Invisible King*, supports the idea of a finite God.

its final accomplishment in God, the supreme ideal of personality.[1]

Arguments in Favor of Pluralism.—The arguments in favor of Pluralism can scarcely be stated any better than they were by Professor James who, outlining the advantages of the pluralistic theory, contends that "1. It is more 'scientific,' in that it insists that when oneness is predicated, it shall mean definitely ascertainable conjunctive forms. With these the disjunctions ascertainable among things are exactly on a par. The two are coördinate aspects of reality. To make the conjunctions more vital and primordial than the separations, monism has to abandon verifiable experience and proclaim a unity that is indescribable. 2. It agrees more with the moral and dramatic expressiveness of life. 3. It is not obliged to stand for any particular amount of plurality, for it triumphs over monism if the smallest morsel of disconnectedness is once found undeniably to exist. 'Ever not quite' is all it says to monism; while monism is obliged to prove that what pluralism asserts can in no amount whatever possibly be true—an infinitely harder task." [2]

Criticism of Pluralism.—Many strong objections may be brought against Pluralism as a satisfactory explanation of the problem of reality in the universe. Nor has any sufficient answer ever been made to them. In the first place, it is objected that Pluralism, no less than Monism, fails fully to explain change, the problem which is at the bottom of all cosmology. If things are plural, and are in a constant state of evolution, the explanation of the same must be sought somewhere outside the things themselves.

[1] Consult Perry, *Present Philosophical Tendencies*, pp. 242 et seq.
[2] *Some Problems of Philosophy*, pp. 142, 143.

Where there is change, there is causality. But nothing causes itself. We must search for the source of causality outside of things, and we can find it nowhere outside of God, Who is at once the Causeless Cause, and the final unit source of all causality in this universe. By doing away with God, Pluralism eliminates the other term in change, and thereby fails to explain it. On the other hand, by assuming that things interact, it assumes the very principle which it attempts to explain.

Pluralism accounts, as no form of Monism does, for the infinite variety and manifoldness of things. It offers no explanation, however, for the multitude of remarkable resemblances between things, which are undoubtedly as prominent and as fundamental a characteristic of reality as is variety.

Pluralism, while objecting strenuously to Monism on the grounds that it does away with freedom, falls itself into a no less grave difficulty by not distinguishing clearly between freedom and mere causality. In the pluralistic, or melioristic, universe of James, man does not possess any larger share of freedom than do the plants or animals. Chance rules the universe, and as Perry remarks, "it is as likely to be the mishap of which man is the victim, as the opportunity of which he is the master." [1]

A very serious objection to Pluralism is its theory of a finite God, which not only involves insuperable difficulties from the point of view of religion, but renders the problem of good and evil insoluble.

Conclusion.—From the above exposition, admittedly inadequate, of the theories which have been advanced to explain the problem of the one and the many, it follows that the doctrine of philosophical Dualism presents the solution

[1] *Present Philosophical Tendencies*, p. 254.

best able to deal with facts as we know them. The most searching analysis of reality more than justifies the belief of the plain man that the world is made up of two radically different classes of entities, the material and the spiritual.

Dualism, it should be recognized, does not entail the reduction of all experiences to only two kinds. It frankly acknowledges that physical phenomena are of an almost infinite variety, while mental phenomena are scarcely less varied. In spite of this variety, there runs through both classes of experience a unifying characteristic which marks them off from each other. Pluralism accentuates the diversity of things, but fails to give due prominence to their similarities. Monism, on the other hand, submerges all dissimilarities in an all-embracing likeness. Our position, that of Dualism, refuses either to do away with the distinction between mind and matter, subject and object, self and non-self, or to deny its real validity because of the multitude of supposedly conflicting forms under which things appear. And the chief advantage of Dualism is that it does no violence to ordinary experiences, nor to the religious and moral convictions which have played so prominent a rôle in the development and preservation of our Christian civilization. It must never be forgotten that, above all things, human personality must have a valid and adequate recognition in every construction of the world which philosophy attempts. The worth, freedom, responsibility, and meaning of life are not to be swallowed up by a timeless Absolute, nor frittered away in the play of cosmic forces over which we can have no possible control. Nothing short of an over-powering argument will alter the general belief that our individual existence, with its strivings, defeats, and successes is the ground of a self independent of the cosmos or of other selves. Until this argument is forthcoming, both plain man and philosopher should hold fast

to the universal conviction that we are distinct and separate individuals.

While it would be unfair not to recognize the limitations of philosophical Dualism, it must be pointed out that these are but the limitations of human thought itself. There is a veil behind which reason cannot carry us. Faith alone holds the key to the mysteries hidden in the region beyond that veil.

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CHAPTER III

THE PROBLEM OF THE NATURE OF REALITY

The Problem.—The problem which we propose to treat now is very closely allied to the problem in ontology discussed in the preceding chapter. In fact, it is but an extension of that problem, the central one in all metaphysics. There the question was very broad, and had to do with the universe as a whole. The inquiry was: Is the Universe one or many, and what are the relations of the parts to the whole? This fundamental question carries with it another and a no less interesting one; namely, What is the nature of that which we call real? If this world in which we live is made up of but one entity, thing, or substance, what is that substance? If, however, it is composed of two or more substances, are these substances material, spiritual, or possibly a combination of both? The answers given are known in philosophy as *Materialism* and *Spiritualism*. A modern form of Materialism which asserts that the universe is material, but that, if anything higher in the scale of being than the material exists, we are incapable of knowing it, is called *Agnosticism*. Both Materialism and Spiritualism, regarded as systematic solutions of certain problems of metaphysics, have had great influence on the conceptions of the nature of man current in psychology. They have also flowed over into Epistemology, coloring philosophical theory both as to the origin and validity of human thought. At this point we shall disregard the psychological and

epistemological implications contained in either Materialism or Spiritualism, and confine our attention to the cosmological aspects of the problem.

Materialism.—The materialist agrees with the dualist, realist, and the pluralist that the external world is a real world, and that what we perceive when we see, touch, or feel things is a real world. Whatever the mind may be, this much is certain, it is not the same thing that it perceives. But while the materialist admits the distinction between the perceiver and the perceived, he does not acknowledge that they are two different substances. At bottom they are but one, which we call matter. Hence the name Materialism. It is in this metaphysical sense that the term is here used.

With the exception of some ancient thinkers like Leucippus, Democritus, and Epicurus who were dualists, materialists have all been monists, either in theory or in tendency. This is, in an especial manner, true of modern Materialism.

The fundamental conception of every kind of Materialism may be summed up in the statement that all reality is body. No substances other than those composed of matter exist. The primary qualities of matter are extension, impenetrability, figure, and motion, and, it is out of this stuff, so to speak, that bodies are composed. Sensations are simply the secondary qualities of things, and do not exist separated from the person who experiences them. They are, like thoughts, a function of the movement of the sense organs and the brain, which are material. Thought, no less than matter, consists of molecules in motion. This more or less crude form of Materialism, which conceded to matter the power of thought, was modified greatly when, under the influence of Leibniz, matter endowed with force

was substituted by philosophers for matter merely endowed with extension, as in the theory of Descartes.

Materialism reached the highest point of its influence in France during the eighteenth century. Amongst French philosophers, thinking became a function of the brain, for the reason that physiological processes always accompany psychological processes. Science proved, they told us, that only animals which possess a nervous system think. Therefore, the possession of a mind is the necessary consequence and concomitant of the possession of a nervous system. As the operations of the nervous system are purely mechanical, so the operations of the mind can be explained in mechanical terms without any recourse to spiritual entities or forces.

Moreover, Materialism, it was contended, is scientific (in fact, it is the only scientific theory) because it endeavors to explain phenomena, both physical and psychological, in terms of antecedent phenomena already known, and not by the introduction of spiritual principles, or psychic forces, or a soul into the domain of physical action. Science sees in the processes and acts of consciousness only a very special kind of physiological process. It may be difficult to understand how matter can perform so many and such highly complex activities as, for example, judgment, volition, etc. Everything in biology, anatomy, and physiology, however, points to a necessary dependence of mind on brain. There is, therefore, no reason to suppose that any substance other than matter exists in the universe.

Such is the doctrine of Materialism which has had many advocates amongst modern thinkers, the most prominent of whom were Hobbes, La Mettrie, Holbach, as well as Hume, Hartley, Priestley, etc. The spirit of Materialism has been violently anti-religious at all times (it was especially so amongst the French Encyclopedists, of whom Voltaire was

the acknowledged leader) the crowning argument for its acceptance seeming to have been the desire to do away with every form of supernaturalism by denying the very possibility of the existence of the spiritual. Likewise, it has always manifested a decided mechanistic tendency, due probably to the success attained by this attitude in the study and marvelous development of experimental science since the beginning of the nineteenth century.

The advance of science bestowed new life on the dying Materialism of La Mettrie and Holbach. Both biology and physiology appeared to confirm the view that mind was a useless luxury in trying to explain the universe. The doctrine of evolution gave added support to this position, implying, according to general opinion, a gradual development of all things from an original lifeless atom, which, solely by the action of the forces with which it was endowed from the beginning, has originated everything, living and non-living, physical and psychical. Existence, therefore, becomes a problem primarily of chemistry, which is itself but a form of physics.[1]

Arguments in Favor of Materialism.—The arguments advanced to support Materialism may be summarized briefly under the following headings:[2]

Only extended objects exist in space. A spiritual substance is by hypothesis unextended. The soul, for example, cannot occupy space no matter how small. Matter, therefore, alone exists.

We have no right to assume the existence of the spiritual, if everything in the universe can be explained on the same

[1] For an historical statement of the progress of Materialistic thought, see Weber, *History of Philosophy*, pp. 404–433, and especially Section 61 on David Hume. Also, Lange, *History of Materialism*, trans. by Thomas.

[2] For the materialistic arguments of Priestley, see Weber, *History of Philosophy*, pp. 409–410.

principles as material phenomena. But thought can be explained in the terms of chemistry and physiology.

All our knowledge can be proved to have arisen from a combination and refinement of sense data. Sensation is a brain function; likewise thinking.

Evolution proves that the development of the mind is completely and at all points dependent on the development of the body. Why then insist that bodily function is different from mental function?

The history of modern science, whose standpoint is wholly materialistic, by its very successes proves the truth of the materialistic hypothesis. [1]

Criticism of Materialism.—Crude Materialism has few, if any, advocates to-day. As a metaphysical theory, its weaknesses are so many and so evident, that it has actually ceased to exist as a plausible explanation of the nature of reality. It will only be found, and defended, in medical and allied circles, and not even there except as the proper mental attitude which should characterize the scientific worker.

The principal argument against Materialism is that it assumes the body and mind to be identical because there can be proved to exist a wonderful uniformity between physical and psychical processes. But this is precisely the question under debate. When, we ask, did a relation of uniformity become synonymous with a relation of identity? To assume that thought is but a function of the brain is to prove nothing. As Paulsen remarks, "Thought *is not* motion, it is thought." [2] No one has as yet succeeded in seeing the brain molecules in motion, and until this operation has been observed, and the molecules have been shown to be the source of our thought processes, it is sheer nonsense

[1] Paulsen, *Introduction to Philosophy*, pp. 60–66, and especially the note on Büchner.

[2] *Introduction to Philosophy*, p. 83.

to speak of thought as a function of the brain. No materialist has ever shed the faintest ray of light on the darkness which enshrouds every materialistic explanation of how an intellectual operation is but the necessary consequence of some physical movement.[1]

The fact of the dependence of body on mind is quite as well established as that of mind on the body. Psychology gives innumerable examples of this dependence. Shall we then conclude that matter is but an aspect of mind?

The distinction between the primary and secondary qualities of matter is purely academic. As far as the perceiver goes, it is impossible to perceive the primary qualities, except by and through the secondary. If the secondary do not exist, neither do the primary. It is a pure assumption, unsupported by any evidence and contrary to all experience, to state that secondary qualities do not represent anything actually existing in matter, but that primary qualities are the very essence of things.

Many other arguments might be adduced against Materialism. For an extended exposition of them we refer the student to Külpe who concludes that not only is Materialism, "as an explanation of the world-whole, a very weak hypothesis, but that it is exceedingly improbable." [2]

[1] Professor Tyndall in the famous address to British Association at Norwich—*Rudolf Eucken: His Philosophy and Influence*, quoted by Meyrick Booth, p. 66: "The passage from the physics of the brain to the corresponding facts of consciousness is *unthinkable*. Granted that a definite thought and a definite molecular action in the brain occur simultaneously, we do not possess the intellectual organ, nor apparently any rudiments of the organ, which would enable us to pass by a process of reasoning from one to the other. They appear together, but we do not know why. Were our minds and sense so expanded as to enable us to see and feel the very molecules of the brain, were we capable of following all their motions, all their groupings and electric discharges, if such there be, and were we intimately acquainted with the corresponding states of thought and feeling, we should be as far as ever from the solution of the problem— 'How are these physical processes connected with the facts of consciousness?' The chasm between the two classes remains still intellectually impassable."

[2] See Külpe, *Introduction to Philosophy*, pp. 122–126.

For the religious and moral aspects of Materialism, read Paulsen, *Introduction to*

Agnosticism.—The term *Agnosticism* is applied to an attitude or tendency which claims that the spiritual, if it does exist, is unknowable. As generally used, Agnosticism has particular reference to religious doctrines, to the belief in the existence of the supernatural, which it does not deny but holds to be "unknowable." In the present connection, however, it refers to a form of Materialism which, while insisting on the fundamental doctrine of Materialism that only bodies exist and are knowable, professes ignorance both as to the nature and existence of spiritual entities. The present-day materialist, as a result of the findings of modern psychology, is not quite so sure of his ground as were the followers of La Mettrie and Hobbes. The sweeping character of the statements of the older Materialism has been toned down to meet the objections arising from our increased knowledge of psychological processes. We are now told that spiritual entities may possibly exist. However, we cannot prove that they exist nor know anything about their nature.

This new form of Materialism is grounded on the assumption of *Positivism*, that the knowable is coextensive with the sensible, and that all universal ideas are but collective ideas which, when analyzed or decomposed, are shown to be nothing but the data of sense experience. To the idea of matter is added that of force. Materialism calls this new substance, "force-matter." But force-matter is noth-

Philosophy, pp. 67–74. Paulsen shows conclusively that moral laws are natural laws no less than are physical laws, a point which the modern materialist is very apt to forget.

We may be pardoned for quoting in this connection Marvin, *Introduction to Philosophy*, p. 194, who writes: "Materialism actually tends to undermine our belief in God and in the universal validity of our moral judgments. We tend to think that in a world of atoms governed wholly by purely mechanical laws, there is no room and no rational need for God, nor any basis for morality other than the chance working of physical forces that have given rise to certain moral instincts and sentiments in our brains."

ing new. It is the old idea of matter decked out in a new verbal dress.

Agnosticism, like Materialism, is both monistic and materialistic, and in sharp contrast to a dualistic and theistic philosophy. The radical political and religious tendencies of Agnosticism are evidenced in the writings of all the followers of the new Materialism, and in no one more prominently than in those of Ernst Haeckel and his school. [1]

Of all the forces which served to develop the new Materialism, the Darwinian theory undoubtedly exercised the most profound influence. The materialists insist that Darwinism, by its theory of natural selection, did away with such principles of nature as involved purposiveness, finality, or what is known as teleology, and erected mechanism into a satisfactory explanation of the origin and development of the universe. Add to this, the successes attained by the application of mechanistic principles to anatomy, physiology, physics, and chemistry, and one has a body of apparently irrefragable arguments against any intervention by a spiritual or supernatural power in the ordered movements of the cosmos.

The arguments advanced to prove the new Materialism do not differ in kind from those which the old Greek, or modern German and French materialists, have always invoked. There has been a change of emphasis from the metaphysical to the scientific, but not with any added success for the cause of Materialism. These arguments, drawn from scientific sources, will be examined at length in the chapter on Vitalism and Mechanism.

The new Materialism, while it has dropped the dogmatic attitude, which asserted that mind cannot exist, is neverthe-

[1] Consult Külpe, *The Philosophy of the Present in Germany*, trans. Maud & G. T. W. Patrick, pp. 83–106, for a statement of the Materialism of Haeckel. For a critique, Engert, *Der Naturalistesche Monismus Haeckels auf Seine Wissenschaftliche Haltbarkeit geprüft.*

less essentially one with all the older forms of Materialism. Although it refuses to parade under the banner of Materialism, and calls itself Positivism, or Neo-Criticism, it remains, as far as fundamental doctrines go, Materialism.[1]

Spiritualism is now in the saddle. Materialism, whether in the form of Materialistic Monism, Sensationalism, or Positivism, is utterly discredited before contemporary thought. Only a philosophy which recognizes the duality of nature, and assures to mind as large a place in the universe as it does to body, can hope to make a lasting appeal to present-day thought. Science has not banished either mind or finality from the world. It has but served to emphasize the value of human personality, and the necessity for the existence of spiritual forces, if we are ever to solve the problems which arise from man's contemplation of the universe. It is not in any form of Materialism, nor, as we shall see, in any exclusively spiritualistic conception of things, that we shall discover the truth about the nature of reality.

Spiritualism.—*Spiritualism*, as a systematic solution of the problem of the nature of reality, should not be confused with what is often called by the same name, but more correctly should be styled *Spiritism*. Spiritism denotes a belief in the possibility of communication with disembodied spirits through the agency of persons called mediums, or by means of mediumistic devices. Spiritualism, on the other hand, is a philosophical doctrine which accepts the reality of the existence of the spiritual or of the mental, in contrast to Materialism which believes that the universe is made up of but one reality, matter and its properties. Like Materialism, Spiritualism has had a long history. Many of the

[1] Read Perry, *Present Philosophical Tendencies*, pp. 63–84, for a critique of both naïve and critical Naturalism.

Greek thinkers were spiritualistic in their metaphysics. Following upon Anaxagoras, Plato and Aristotle vindicated for all times the claims of mind to a necessary place in our interpretation of the world. Plato, not only is rightly called the father of spiritualistic philosophy, but has done as much, if not more than any subsequent thinker, to win for Spiritualism the ascendency in philosophy which it has always held.

Since the days of Plato, Spiritualism has appeared in many different shapes, and has been known by as many different names. The leading idea of all spiritualistic thought, however, has been the thesis that real beings exist, and that these beings, at least some, if not all, are radically distinct from matter. In philosophical constructions of a monistic tone and character, this spiritual being has been held to be the only real being, existing in the form of a universal mind, of which all other minds are but aspects. Matter has no real existence in this conception. Spiritualism has assumed, on the other hand, a pluralistic attitude which, while conceiving the universal mind as an all-embracing reality, does not deny the existence of other minds which depend both for their existence and activities on the Divine Mind. A more clear-cut distinction between mind and matter, God and nature, is recognized in what we may call *Moderate Spiritualism*. Aristotle is the author of Moderate Spiritualism, but, unfortunately, his ideas as to the exact relations of the soul to the body in the human individual are somewhat obscure. Christian philosophy, especially in the Middle Ages, elaborated a well thought out and logical theory of these relations. It is this aspect of Spiritualism which we accept and defend.

The Spiritualism of Leibniz.—Leibniz is looked upon by many as the father of modern Spiritualism, in the sense of

those who believe that only the spiritual exists. He started with the idea of substance which he defined as Descartes did; namely, that it is a being which exists *per se*, but with this distinction, that his substance is essentially dynamic, while that of Descartes was static. "No body without movement, no substance without effort," was an axiom of Leibniz. From this definition he deduced that only one substance existed which was both conscious and unextended, but which, because of its inner power of action, should be looked upon as manifold. Since force alone exists and force is the very essence of matter, matter is in reality not matter at all, but mind. Now, matter as force is unextended, incorruptible, simple, and indivisible. Force, since it is manifold, entails a multiplicity of substances, which he called *monads*. These monads are like atoms, or, better, like mathematical points, since each is a substance distinct from every other substance, each is a microcosm in itself. But each monad does not represent reality with the same degree of clearness. There are diverse grades of representation. The body monad represents the world in a confused way; the human soul monad, with clarity and distinctness. One may ask, How do these monads, since each is a self-active universe, act upon one another? By virtue of a "pre-established harmony" of which God is the author, replies Leibniz.

The philosophy of Leibniz is undoubtedly a very ingenious one, his doctrine of monads and of the different grades of consciousness being one of the most original conceptions in the whole history of philosophy. The acceptance of it, though, would entail so many difficulties that it has found few, if any, defenders, and no disciples.

In the first place, it is a purely a priori construction of the universe. It may be true and it may not be true—Leibniz offers no arguments which would convince us of its reality.

The conviction, however, is borne in upon every one who examines the doctrine of monads that they are unreal. It is difficult for us to believe that matter is psychical. If it were, indications of this psychical nature, somewhere, somehow, would filter in upon our consciousness. That matter is active is an accepted belief of modern science, but that this activity is nothing less than a result of a play of spiritual forces imbedded in an entity which is essentially spiritual, cannot be harmonized with what we know of nature. One thing is certain, Leibniz has not convinced the world that all processes, physical and psychical, can be reduced to a common spiritual basis.[1]

The Spiritualism of Berkeley.—The philosophy of Berkeley is an extreme Spiritualism, an out and out *Immaterialism.* Starting with the principle of Locke that knowledge is but the perception of the agreement or disagreement of our ideas, he goes much further and lays down the proposition that not only are colors, sounds, tastes, etc., products of the mind, but that even extension, shape, motion exist only in the mind which perceives them, and not in things themselves existing outside the mind. According to Berkeley, to exist is to be perceived: "*esse est percipi.*" Matter is, therefore, a phenomenon of the mind, and does not exist outside of a subject which is conscious of it. The so-called external world is a mental construction. Things and thoughts are identical. God and the human mind really exist. All else is fiction.

The arguments, however, advanced by Berkeley to prove his doctrine of Spiritualism are not convincing. He argues from the fact that since materialists admit that the so-called secondary qualities of matter, sound, color, taste, etc., are

[1] Turner, *History of Philosophy*, pp. 507–512; also, Weber, *History of Philosophy*, pp. 345–369.

essentially mental, there is no warrant for our assuming that the primary qualities, extension, motion, etc., are not likewise mental. The fact that they, unlike the secondary qualities, are always present, does not prove that they exist apart from our perception of them. The reasoning of Berkeley is logical enough; his assumption, however, that colors, sounds, tastes, etc., do not exist *in any way* outside the perceiver is false. Sounds, etc., as perceptions exist only in the mind, but sounds as physical things exist in nature. [1]

The theory of Berkeley fails altogether to explain the nature of reality. By denying the real existence of the world of time and space, and by building up in its place a world of ideas, he not only destroys materialism, but with it all possibility of ever understanding the manifest manifoldness of reality. If nature is but the continuous manifestation of the Divine Mind to human minds, natural science ceases to exist, psychology becomes meaningless. In particular, the Berkeleyan Spiritualism offends all our conceptions of the essential uniqueness of human personality.

The Spiritualism of the Objective Idealists.—The more modern forms of Spiritualism, as a metaphysical doctrine, have a very close connection with epistemology and are,

[1] Marvin, *Introduction to Philosophy*, pp. 196–202, for the arguments of Berkeley. Marvin contends, and rightly, that Berkeley does not reply to the ontological problem at all. His answer is a truism. "Have Berkeley and the Berkeleyans really answered our question? The ontological problem was this: What are the ultimate characteristics of the world; what is its essence? We did not ask, How is the world known? We asked, What is the world as known to us? Surely the world as known to us is in part at least a material world. Let us grant, for the sake of argument, that the world exists only as perceptions in the mind of each of us. Then our question would run, What is it that you Berkeleyans perceive? You reply, We perceive our perceptions. But what an absurd answer. If we ask a man what he sees yonder in the street, and he replies, 'I see what I see,' how are we any the better off because of his most truthful information? The materialist may then continue to maintain, the world you perceive is in truth the world you perceive; but when you commence to describe it any farther, you will find it a material world; and that is all I mean."

therefore, often spoken of as *Idealism*. The epistemological aspects of Idealism will be examined later. Here we shall confine ourselves to a consideration of its metaphysics, which is at bottom a monistic solution of the ontological problem.

Idealism does not deny the existence of things. It asserts, however, that they do not exist independent of mind. All being is pure thought. Idealists admit, it is true, that the activities of nature (the most prominent characteristic of which is change) are different from those of mind. The world is ever in a state of becoming. But change can never be explained adequately in the terms of a mechanistic philosophy. The trouble with the materialist is that he looks upon nature from a very limited standpoint. There is a mental world no less than a physical world. If one examines closely the workings of the mental world, he will find a perfect analogy, a perfect parallel between it and the workings of the physical world. The constant changes which take place in ourselves, as one moment we feel, the next think, the next will, are an almost perfect reproduction of what is going on in the external world. Look at the whole world, not at a part of it, and look at it from the standpoint of knowledge and it becomes apparent immediately that it is one. For, everything is either knower or known. The physical is but an aspect of the psychical. Matter does not really exist. The Absolute exists, and what we call mind and matter, are but the endless, almost infinite differentiations of an underlying unity manifesting itself in the ceaseless changes which appear about us. The prime characteristic of this unity is activity or change, its essence is mind, and our understanding of it depends on our interpretations of its multitudinous processes in terms of the mental.

The most powerful exponents of this view in modern philosophy are Fichte and Hegel. As a metaphysic it

cannot be fully appreciated, nor can the difficulties which it involves be grasped, without an understanding of the epistemological doctrines upon which it is based. These we shall examine later in the chapter on Idealism, Realism, and Pragmatism.[1] Up to very recent times Idealism was the most popular form of Philosophy. In England, Green, Bradley, and Bosanquet were Idealists, and in the United States, Royce was acknowledged to have been the leading defender of the idealistic point of view.

Spiritualism has grown of late into the doctrine called *Panpsychism*, which maintains that all material things are but our perceptions of them. Nothing is external to us. Our perceptions image a reality which is within us; outside of the mind, the appearances and manifestations of our perceptions exist, but that is all. Panpsychism is the extremest form possible of Spiritualism. And, as Paulsen, its most noted exponent, writes: "It rests essentially on the parallelistic theory of the relation between the physical and the psychical, and upon the voluntaristic psychology. It culminates, however, in the monistic solution of the cosmological problem." [2]

Another characteristic of modern Idealism is that it has shifted the center of metaphysical unity from the intellect to the will. It is, therefore, voluntaristic, in contrast to the intellectualistic position of thinkers like Kant and Hegel. Contemporary voluntarism makes the will the unitary ground of all reality, which in its strivings after reality and morality finds completeness and satisfaction in the Ideal Will. "Nature is in evolution," says Weber, "of which infinite Perfection is both the motive force and the highest goal." [3]

[1] For the present the student may read Leighton, *The Field of Philosophy*, pp. 253–269; Turner, *History of Philosophy*, pp. 567–581.

[2] *Introduction to Philosophy*, p. 144.

[3] *History of Philosophy*, p. 603.

Arguments in Favor of Spiritualism.—At first glance it would appear that the arguments used to destroy Materialism should prove just as effective in sustaining the position of Spiritualism. Such, however, is not the case. They prove indeed that the universe contains other than material beings; they do not prove that it is made up solely of spiritual existences. Hibben states this as follows: "Materialism false does not argue Spiritualism true; for the most cogent arguments against Materialism bear upon its monistic features, and these arguments also make against Spiritualism regarded as a monistic philosophy. The transition from mind to matter is as bewilderingly mysterious as the transition from matter to mind. The two disparate phenomena cannot be brought under the single category either of matter or of mind." [1]

Experience forces me to conclude that mind exists, says the idealist. But nothing compels me to the position that matter exists. I only know it in as far as I know my own thoughts. The "data of experience" are as wide, and only as wide, as the phenomena of consciousness. What we ordinarily call the objective side of consciousness is nothing but certain relations which by custom we refer to as matter, motion, energy, etc. If we recognize these relations to be what they really are, that is, aspects of consciousness, no necessity arises for accepting a reality existing outside our own minds.

Another argument for Spiritualism is founded on the assumption that our senses deceive us when they point to the real existence of an extra-mental world. The plain man concludes from his sense experiences that the world is real. When examined critically this belief is found to be an illusion. What we are aware of is not the shape, size, color of a table, but our own sensations. If proof is needed of this

[1] *The Problems of Philosophy*, p. 49.

assertion, recall the innumerable times that we have been deceived by our senses. And what ground of assurance have we that our senses do not always deceive us when they pretend to acquaint us with real things outside ourselves? Of the reality of our perceptions, no one can doubt. The existence of a real world, or of matter, is at best problematical. It can all be explained on the assumption that matter does not exist.

Many other arguments from psychology and epistemology are adduced to prove the possibility of Spiritualism. We shall examine them later in their appropriate places.

Criticism of Spiritualism.—The spiritualistic hypothesis is extremely arbitrary in this that it assumes that matter and its functions are an exact parallel of mind and its functions. Nothing that modern psychology has discovered necessitates the view that there exists an exact analogy between physical and psychical processes. Both the materialist and the spiritualist are wrong when they attempt to force all nature into one or the other mould. Science, on its side, proves that physical energy is one kind of energy; psychology proves that psychical energy is a totally different kind of energy. Neither one of them demands an exclusively materialistic or spiritualistic interpretation of all the processes of nature.

When spiritualists attempt to explain the nature of the spiritual entity existing outside of the mind of the perceiver, they do not describe it in terms which are justified by our daily experience. The monads of Leibniz, the Idea of Hegel, the World-as-Will of Schopenhauer find no defense in the conclusions of natural science. We are forced, therefore, to the conclusion that Spiritualism is a one-sided theory of reality, and not in harmony with facts as ascertainable by any known methods of science.

Psychology gives the lie to every form of monistic spiritualism. The mind is not merely the center of thought, it is the first principle of life. Moreover, life is not solely intellectual; it is sensitive and vegetative as well. Nor is the soul situated in the brain; it exists in the whole body and in every part of the body. Physiological psychology does not warrant us in concluding that the nerve cells, or even the cerebral substance, is spiritual. On no other than a dualistic hypothesis can the findings of modern psychology be adequately explained.

In the last place, experience need not lead us to the conclusion that knowledge lacks an objective side. The mind is but one aspect of our sense experiences. To overemphasize the subjective and qualitative side of knowledge, as the idealist does, and to disregard totally its objective side is a very arbitrary procedure, to say the least.[1]

Moderate Spiritualism or a Dualistic Synthesis of Materialism and Spiritualism.—Moderate Spiritualism is so called because it attempts to avoid the extremes of both Spiritualism and Materialism. It is dualistic in contrast to the Monism of Materialism and Spiritualism.

Moderate Spiritualism does not deny the real existence of matter; it accepts the real existence of mind. But matter and mind are not to be confused. They are separate, distinct substances, each one possessing an independent existence of its own. This is the view of the plain man, as well as of all scientific realists and dualists since the days of Aristotle. It is, too, in a peculiar way the Christian view of nature which has always insisted on the distinction between mind and matter, subject and object, God and man.

All the arguments advanced in the preceding chapter in

[1] Külpe, *Introduction to Philosophy*, pp. 130–132.

favor of metaphysical dualism are valid in proving that two real substances, one material and the other spiritual, exist. This point of view will receive added confirmation as we proceed in the discussion of the problems of philosophy. Not only does a Moderate Spiritualism possess the merit of being in close harmony with the deliverances of "common sense," it also manifests the invaluable and convincing characteristics of a theory which is founded on a posteriori arguments and does therefore no violence to the scientific spirit because of arbitrary assumptions. It is, moreover, the working and living hypothesis of every man, whether he be a scientist or not.

The principal difficulty in the acceptance of dualism comes from our inadequacy before the problem of the interaction of mind on body. But, as we remarked before, facts are facts. Our explanation of them is quite another and a different thing. Not to be able to give a wholly satisfactory explanation of the facts of interaction is no justification for taking refuge in either a materialistic or spiritualistic monism, in both of which theories the reality of fact has been sacrificed to the possibility of an assumption. The philosopher, no less than the scientist, must keep his feet on the ground, even though he searches the heavens themselves for explanations to satisfy the problems which disturb his mind.

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CHAPTER IV

THE PSYCHO-PHYSICAL PROBLEM

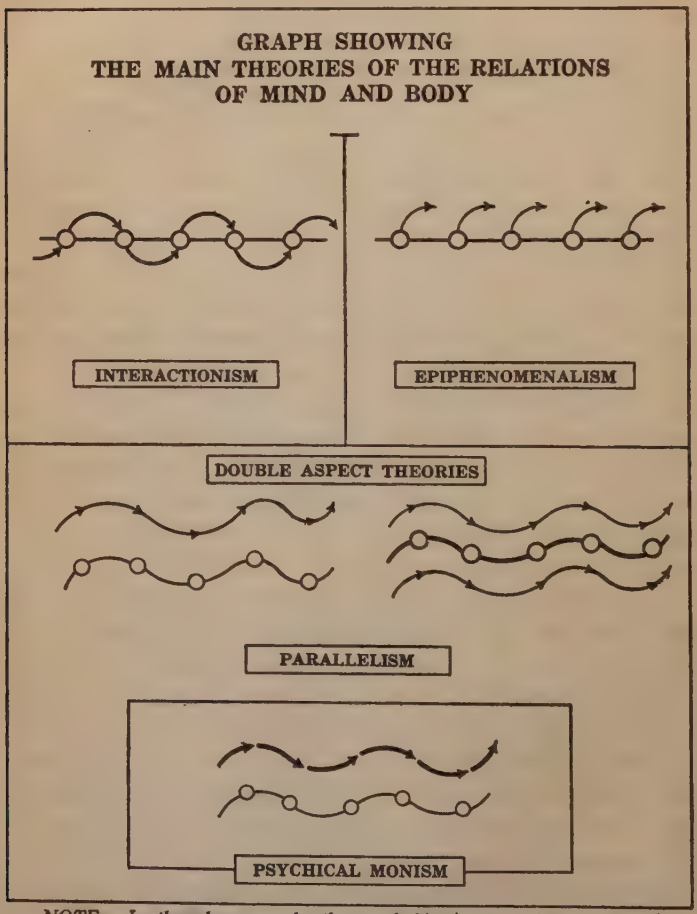
Having formulated the diverse conceptions of philosophers as to the ultimate nature of reality, the question next in order is to determine the precise relations of matter to spirit. That body can influence mind, that the soul acts and reacts upon the body, seem to be incontestable facts. We behold such mutual relations, especially in the field of sense experience, every moment of our waking lives. Extraordinary experiences, like an injury to the head, with its immediate effect on consciousness, or unexampled courage in the face of approaching death, brought about solely by the overmastering power of the will, intensify the common belief that the body-mind relation is not an accidental one, but has its roots deep down in the nature of these entities themselves. When we come to examine these relations in the light of science and of a critical philosophy, it is not so easy to state, and to justify by arguments, a reasoned reply to the problem. Supposing, therefore, that body and mind exist, the question is: What are the relations of the body to the mind? Does it cause all the changes which take place in the mind or is the body itself changed by the actions of the mind? Perhaps each one acts upon the other—an interaction, as it were—in the definite relation of cause and effect, but neither one is supreme? Or, possibly, each one acts altogether independent of the other, like parallels never meeting? Stated thus, or in a somewhat similar fashion, we have what is customarily called the body-mind or the psycho-physical problem.

Marvin [1] insists that it is wrong to state the problem as one of causation. The only question is: Is it a fact that the physical influences the psychical, and to what extent? A given stimulus "A," say, a ray of light, produces a definite physiological reaction in the brain center of vision. Let us call that result "b." Does it produce a corresponding reaction "B," which is a mental state? The problem, therefore, resolves itself into a question of whether "b" is the only result of "A," or whether both "b" and "B" result from "A." The physiologist studies "b"; the psychologist, "B." The philosopher wishes to know what is the relation of "b" to "B," and of both to "A"?

Marvin, however, takes a too narrow view of the problem in our opinion. If it were only a question of the relations between certain physiological and psychological processes, his construction would be both fair and adequate. But is there not something behind the processes, a substrate, a foundation, a substance, if you will? It is altogether too much to say that the problem is solved by confining our investigations to the relations of the two processes. In this theory, it would undoubtedly be true that both the parallelist and interactionist are right. But Marvin has stopped short of the very point where the real problem begins. Are these processes the whole of mental life, even assuming that any given process includes and integrates the totality of our previous mental life, or is there not something behind the processes which unifies, binds them together? It is no answer to assert that both the physiological and psychological processes exist. No one denies this fact. But what are they, and how do they exist, is the problem under discussion. Perceptions are not merely phenomenal. Their very existence postulates a belief in the validity of the law of causation. On no other basis, unless one is determined to

[1] *Introduction to Philosophy*, p. 278.

accept Solipsism, can these phenomena be explained. In spite of any theory of ours as to the nature of sense perception, therefore, the psycho-physical problem remains and



NOTE:— In the above graph, the symbol (-○-)represents matter and (⟶)represents mind. The dark arrow represents a real entity, and the light arrow an epiphenomenon, aspect or appearance.

demands a reply. Hoernlé [1] calls this an "awkward problem." And such undoubtedly it is, but when did Philosophy turn away from the consideration of a problem because it presented an awkward side or "created a situation which is well-nigh desperate"?

The psycho-physical problem is one for which answers were formulated very early in the history of Philosophy. These replies range all the way from the grossest Materialism to the most extreme forms of Spiritualism. Moreover, each philosopher has given to his answer a turn which is often peculiarly personal and individual, with the result that it is rather difficult to express all the theories ever formulated under a few principal groups. The general practice is to reduce the different philosophical formulations to four solutions: namely, *Interactionism*, *Epiphenomenalism*, *Psycho-Physical Parallelism*, and *Idealistic Parallelism* or *Psychical Monism*. The diagram on the opposite page will visualize for the student these principal solutions.

That these four types of formulation practically exhaust the possible answers which may be given to the problem is evident when we consider that the question cannot be stated in any more than the following ways:

1. That body alone acts (Epiphenomenalism)
2. That mind alone acts (Idealistic-Parallelism or Psychical Monism)
3. That body and mind interact (Interactionism)
4. That body acts and mind acts in parallel fashion but without affecting each other causally (Psycho-Physical Parallelism)

[1] *Studies in Contemporary Metaphysics*, p. 206; Pratt, *Matter and Spirit*, pp. 89–130, especially his criticism of the Kantian attitude towards the mind-body problem.

It would be well, also, for the student to remember, in his examination of these theories, that Interactionism accepts the dualistic point of view, while the other solutions are all modifications, more or less explicit, of a monistic metaphysics.

Epiphenomenalism or Psychological Materialism.—Starting with the assumption that the universe is purely material, the materialist asserts that mind is at bottom but a special kind of matter, and that the functions of mind are intrinsically dependent on the functions of the brain. The modern materialist dislikes to identify, openly and in so many words, brain with mental function; he states his belief in a more circuitous way by calling the mental state an "epiphenomenon" of the brain. Consciousness is likened to the flow of a stream, every point of which is definitely linked up with a brain process, upon which it depends. Psychical functions, as distinct from physiological functions, are non-existent. They depend completely upon the working of the central nervous mechanism, but upon which they exert no influence of any character. Mental functions are much like the shadows cast by the moving parts of any machine.

Epiphenomenalism is widely accepted, especially by physiologists. Huxley did a great deal to popularize it, and Hodgson is perhaps its best known contemporary defender. The arguments advanced to prove this view are those already noticed in the chapter on Materialism. These arguments revolve about the extension of the mechanistic explanation of inorganic matter, current in natural science, to the domain of the organic and psychical, the incompatibility of the law of the conservation of energy with a recognition of the existence of psychical energy in the universe, and the doctrine of the evolution

of consciousness from a lower and non-conscious form of matter.

The older Materialism, which viewed states of consciousness as but functions of the brain, is now universally regarded as absurd. To identify mind with brain is to talk nonsense. On the other hand, while Epiphenomenalism is but a form of Materialism, it is a form which presents elements which are capable of being defended. The facts brought out by comparative anatomy, physiology, and biology, especially in the matter of the localization of cerebral functions, seem to point to a causal dependence of mind upon brain states. To these facts we may reply that there never was any question of a certain amount of dependence of consciousness upon the functioning of the brain. Both parallelist and interactionist admit as much. They point out, however, that dependence does not involve identity, the tacit assumption of all materialists. Moreover, if the physical causes the psychical, that is, causes states of consciousness which are by hypothesis an epiphenomenon, what becomes of the law of conservation of energy?

In answer to the arguments adduced from Darwinism, we may reply that the theory of evolution does not necessitate our acceptance of the evolution of mind from a primordial lifeless matter, even granting for the moment that the theory of Natural Selection is an adequate statement of evolution (a position against which many arguments might be advanced). This is evident when one considers that the passage from the material to the spiritual is unthinkable, except on the theory that mind actually influences body, and is the reason why certain qualities in the individual are selected out and transmitted in preference to other qualities,—products of a lower grade of consciousness. But if, as the Materialists maintain, mind cannot influence body in any way, it being an effect not a cause, the com-

manding place assigned to mind in Natural Selection certainly is in open violation of the fundamental principles of Materialism.

There has recently arisen what has been termed the *New Materialism*, the leading proponents of which are Warren, Montague, Sellars, and Santayana. Although these thinkers have little sympathy with the materialistic assumptions of former days, they are not adverse to explaining consciousness in terms of energy, with which it is to be identified. For them the living organism is *ipso facto* conscious: "consciousness is the brain become conscious." [1] It is but "a variant of the brain." [2]

The arguments of the New Materialism, however, do not reconcile us to a belief in the materiality of mind. They are an ingenious turning and twisting in the net of difficulties which encompass every form of Materialism, no matter how cleverly disguised from view they may be. The New Materialism does not solve these difficulties any more than did the theories of Büchner and Haeckel.

Psycho-Physical Parallelism.—Parallelism is an explanation of the relations existing between body and mind which endeavors to avoid the difficulties of both Materialism and Interactionism. While maintaining a strictly scientific attitude by a whole-hearted acceptance of the mechanistic and evolutionary theories as to the nature of both physical and psychical processes, it concedes to consciousness a certain independence of purely bodily functions. Both processes are real, but no relation of causality exists between

[1] Sellars, *Critical Realism*, pp. 244–245.

[2] For an exposition of the New Materialism read Pratt, *Matter and Spirit*, pp. 22–47. He concludes: "The New Materialism has failed to bring forth a single consideration that makes the materialistic hypothesis really easier of acceptance than it was at the time when nearly every thinker gave it up, twenty years ago." Op. cit., p. 47.

them. Each one moves in a circle all its own; the only relation being that of concomitance, like two telegraph wires which run parallel to each other, both of which carry an identical message. Paulsen sums up the theory of Parallelism thus: "Physical processes are never effects of psychical processes; psychical processes are never effects of physical processes." [1] The law of causality holds good in each series, the succeeding process always being the effect of the one which preceded it. Causation does not, however, pass from one series to the other. But while there is no causal connection between them, bodily and mental processes do not take place in a haphazard fashion. There is an order which may be discerned in the parallel workings of mind and body; every bodily function having its corresponding mental function, and vice versa.

Parallelism has appeared under many forms. Dualistic parallelism, which offers no explanation of how the two sets of functions may parallel each other, may be ruled out of consideration because of its lack both of a plausible theory and arguments. The great majority of parallelists are monists, and have developed their theories along two main lines, one of which is called the *Double Aspect Theory*, and the other, *Idealistic Parallelism*. The Double Aspect Theory, or as it is also called the *Identity Hypothesis*, must be subdivided into what McDougall has named, *Phenomenalistic Parallelism* and *Psychical Monism*.

The Double Aspect Theory. Phenomenalistic Parallelism.—The fundamental idea of the Double Aspect Theory is that body and mind are but one thing which manifests itself by two distinct appearances or aspects, the so-called physical and psychical processes. As a matter of fact, body and mind do not exist as distinct substances. We perceive only

[1] *Introduction to Philosophy*, p. 87.

the appearances of body and mind. But one substance exists which is neither body nor mind. What this one reality is depends upon our metaphysical conceptions of reality. For Spinoza, and those he has influenced, the one is God. Kant, on the other hand, stresses the phenomenal side of reality. The noumenal aspect is an unknown. Many illustrations have been given to help us imagine what this relation is like, the most common being that of the curved line which on one side is concave, and on the other convex.

The Kantian formulation of the Double Aspect Theory is difficult to maintain. If bodily and mental processes are but aspects or appearances of each other and not of some third thing distinct from both, the universe is a mere poem, an appearance, which possesses no reality of any kind except the "two appearances which are not the appearances of any thing and do not appear to any one. We are presented merely with two shadows, each the shadow of the other," as Pratt remarks. [1]

The Double Aspect Theory. Psychical Monism.—Phenomenalistic Parallelism is so evidently untenable, except on the assumption that reality is but a figment of the imagination, that it was necessary to elaborate a better and more logical formulation of the Double Aspect Theory if it were to withstand the assaults of its critics. This has been done in Psychical Monism, which, until quite recently, was the favorite form in which Parallelism was defended. According to this theory, there is a "third something" back of the parallel bodily and mental processes. What is this something? It is Consciousness, the only reality, of which our individual consciousnesses are but a part or an aspect. Physical processes exist objectively; when analyzed, how-

[1] *Matter and Spirit*, p. 53.

ever, they are but the appearances of the mental manifesting, for example, my consciousness to your consciousness. The two processes, therefore, are parallel but the causality is confined to the psychical. The physical is but an "epiphenomenon" of the psychical—the converse of the doctrine of Materialism.

Idealistic Parallelism has been in high repute amongst philosophers, especially those of the psychological school. Prominent amongst its defenders have been Paulsen, Wundt, Strong, Clifford, and others. To-day there is in evidence a very decided swing away from Parallelism, especially in its monistic forms. Its greatest claim to recognition had been its complete turning over to mechanistic science, for exploration and explanation, the field of physical action without any fear of unwelcome, and often embarrassing, intrusion from the side of the mind. This won for it almost universal recognition amongst the scientists of the last century. If mind did not, in the slightest manner, ever affect body, it becomes increasingly evident that the law of conservation of energy, and the whole of mechanistic philosophy, need have no objection to a parallelistic theory of the relations of mind to body.

Arguments in Favor of Parallelism.—The arguments, favorable to Parallelism, have been expounded perhaps best by Paulsen and Wundt. Besides the general considerations which seem to point to the necessity of conceiving mind in the terms of a process or of an actuality as against the older view which accepted the mind as a substance, a number of special arguments, drawn in the main from the natural sciences, are advanced to prove the truth of Parallelism. The basic arguments for Parallelism are built upon a searching criticism of the mind-substance theory, which is held to be incompatible with the results of

modern science, and, in whose place, therefore, we are compelled to substitute a function-theory as the only satisfactory scientific explanation of mind. We will present, too, the secondary considerations which have moved many psychologists to accept some form or other of Parallelism. These latter arguments, appeals to sentiment and prejudice in the main, have made as great an impression on many people, and have served to attract as many followers to Parallelism, as have the more metaphysical arguments on which the theory really depends.[1]

Parallelism in no way interferes with the reign of physical or chemical law in the universe. Mechanical law is supreme, even in the province of the human will. There is no such thing as purposeful activity in the universe. Even the living body is an automaton, a very complex one, it is true, but always an automaton. Psychical processes parallel the activities of this automaton, but never interfere with its machine-like precision of action.

Our senses deceive us when they tell us that things really exist outside the mind. So-called things are but the appearances of a mind which perceives them. Consciousness, on the other hand, exists of itself. Why, then, should not consciousness be the true reality, since everything else exists only in as far as it is perceived? Such an assumption possesses the merits of simplicity and economy, both characteristic qualities of every monistic philosophy. In no other way can we escape from a duality of substance.

Parallelism protects the important, if not supreme, rôle which consciousness has evidently played in the evolution of things. If all is consciousness, no one can question its effectiveness as an instrument of human development.

The theory of evolution seems to support Parallelism, for,

[1] For an elaborate exposition and defense of Idealistic Parallelism, we may refer the reader to Paulsen, *Introduction to Philosophy*, pp. 87–144.

if everything has evolved from the lowest form of being up to man, mind must have been present at the very beginning in even the most primordial kind of matter. The continuity of the process of evolution demands that from the very beginning mind should have existed. Both mind and matter, therefore, must have developed in a perfectly parallel fashion, neither one influencing directly the other.

Parallelism, by its recognition of the supremacy of mechanical law in the realm of physical activity, and of spiritual law in the realm of psychical action, offers the only plausible means of reconciling science and faith in a way which is acceptable to both scientists and believers. In this theory, to the scientist remains his law; to the believer, his spiritual interpretation of these laws and of reality. There can be no conflict between the two. Psychical Monism ends forever the conflict between religion and science.

Many philosophers are attracted to Psychical Monism for the reason that it is a contrasting point of view to that of common sense, and to the supposedly worn-out beliefs of primitive man and of scholastic philosophers as to the nature of the soul. To advocate Parallelism gives them a feeling of mental superiority over the plain man who, unaware of the progress of science, is still steeped in the beliefs of a forgotten age. The doctrines of common sense are more than apt to be anathema to that class of thinkers who feel that philosophy demands something more of its followers than the acceptance of theories which satisfied mankind in a primitive state of culture. Parallelism possesses this great advantage—it is not the belief of the man in the street.

The principal argument for Parallelism is based on the theory that mind-substance does not exist except as it is perceived, which means that since no one has ever seen a

mind, only mental processes really exist. There is no need to assume the existence of a reality, a mind-substance, or a soul which supports mental processes. This argument receives reinforcement when we reflect that it is impossible to picture to ourselves how a mind-substance can possibly influence a body-substance. Any connection between a mind, which is unextended, and a body, which is extended, is inconceivable as well as inexplicable.[1]

Criticism of Psychical Monism.—The only form of Parallelism which merits detailed analysis is that of Psychical Monism. Its arguments possess for many a logical and scientific value which has been sufficient to move them to accept the monistic formulation of the relations between body and mind. The difficulties present in this theory are, however, of such gravity and so unanswerable that an unprejudiced thinker, after weighing them, can arrive at but one conclusion; namely, that Parallelism is unable to support the contention that it is an adequate theory of the body-mind relation.

In the first place, the refusal of the monist to accept the reality of mind-substance, or, if you will, of the soul, brings along in its train a host of practical difficulties, any one of which appears to be a sufficient reason for rejecting Parallelism. If the soul does not exist, how, we make bold to ask, does thinking or knowing exist? If the only thing is knowing, *who* knows and *what* is known? If everything is appearance, to whom does the appearance appear? It is no answer to describe consciousness in terms of a stream

[1] For a detailed statement of this argument in its different forms, see Külpe, *Introduction to Philosophy*, pp. 174–177. His criticisms appear to be unanswerable and led him to this conclusion: "It must be noted that our criticism of actuality does not carry with it a profession of faith in the rival theory of substantiality. But it seemed desirable to show that the objections urged against the latter are not by any means of the nature of constraining arguments, and that consequently we must concede the possibility of substantiality, after as before." Op. cit., p. 177.

of thought, each act of which integrates the rest of mental life. If a substance cannot serve as the ground for the successive acts of consciousness, much less can a number of acts become the foundation for a single act.

The theory that mental states are formed by the integration of a number of mental units is both false psychologically, and a surreptitious introduction into the monistic explanation of the idea of substance under a new form. Psychology knows no such summation of conscious states into a unit, except as the effect of other states which are already *parts* of a unit other than themselves. Mental states cannot combine of themselves. Nothing seems more clear than that fact. Each state remains what it was originally, and only becomes part of the stream of consciousness on the assumption that the stream is supported by something other than itself. As a matter of fact, such a stream is nothing but the soul described in new words. To use the expression "stream of consciousness" in any other than a metaphorical sense is to talk nonsense. In no other way than by conceding that the multitude of our conscious processes are brought together in a stream, which is distinct from each one of them individually, does the phrase acquire meaning. Even Paulsen admits that, on the basis of Parallelism, the way conscious units hang together in the stream of consciousness is "inexplicable." What advantage then does Psychical Monism possess over the soul theory that it should be acclaimed a more rational explanation of reality? [1]

[1] Cf. Maher, *Psychology*, p. 510; also James, *Principles of Psychology*, Vol. I, pp. 158–160.

Lotze, *Metaphysic*, Vol. II, p. 170, puts the argument thus: "Any comparison of two ideas, which ends by our finding their contents like or unlike, presupposes the absolute indivisible unity of that which compares them: it must be one and the same thing which first forms the idea of *a*, then that of *b*, and which at the same time is conscious of the nature and extent of the difference between them. Then again the various acts of comparing ideas and referring them to one another are themselves

It is objected that we cannot perceive mind-substance, therefore, it does not exist. It is quite true that we cannot perceive substance. But neither can we perceive the unconscious processes which both Paulsen and Wundt acknowledge to exist. The physicist does not banish substances from the universe by calling them atoms in motion, transformations of energy, ether vortices, electrons, or what-not. The scientist replaces substance by energy only on the supposition that energy remains unchanged in quantity despite the qualitative changes to which it may be subjected. Why, then, should not sensations, feelings, thought, and willing be explained in the same way? That we cannot perceive the atoms which lie beneath energy is no reason to doubt that something does lie there. The same criticism is valid for mind, or rather is more valid for mind, since the manifestations of mind are experiences, like sensations and feelings, whose very nature is to be perceived.

Most of the difficulties of the parallelists with reference to mind-substance arise from a false idea of what substance is. Conceiving it as a mere mass of negative predicates, failing to understand how amidst change it still remains stable, claiming that it is useless as a means of holding together the facts of experience which can be explained without postulating its existence, is it any wonder that substance has been banished from Metaphysics, and soul from Psychology?

But this conception is a travesty of substance as understood by the dualist and animist. For substance he only

in turn reciprocally related; and this relation brings a new activity of comparison to consciousness. And so our whole inner world of thoughts is built up; *not as a mere collection of manifold ideas* existing with or after one another, but as a world in which these individual members are held together and arranged by the *relating activity of this single pervading principle*. This then is what we mean by the *unity of consciousness;* and it is this that we regard as the sufficient ground for assuming an *indivisible soul*."

claims that it is a reality which exists by itself, in the sense that it does not exist in something else. Self-subsistence and stability amidst changes are assuredly very positive things. The manifestations or determinations of substance, namely, quality, action, space, relation, are all subject to constant change. Is it possible to conceive how such changes can occur unless something remains unchanged? The feeling of anger cannot change to one of love, unless some one who was angry before, now loves. It is impossible to imagine love without at the same time imagining some one who loves, or anger without imagining some one who is angry.

The distinction between substance and its accidents is not merely a mental construction; substance really exists outside of and independent of our minds. For if we can prove (and who will deny that we can) that an accident really exists, we thereby and in consequence prove that a substance must exist. This does not mean, as is so often erroneously supposed, that we thereby know how one substance differs from another. No theory of Metaphysics can hope to do what is the proper function of empirical science, namely, to discover the differences between things. Metaphysics simply asserts that substances exist, and to this conclusion it is forced as a result of reasoning upon experience, which cannot explain in any other acceptable way the reality of the mind's experience, except on the substance-hypothesis. For, if there is knowing, feeling, and willing in the world, there must be some one who knows, who feels, and who wills. Neither is it fair to the idea of substance, as defended by realistic thinkers, to understand substance as a something which merely underlies accidents. On the contrary, substance and accident make up *one* thing, a whole, neither part of which exists without the other.[1]

[1] Marvin falls into this very error when, criticising the substance-hypothesis, he

Again, the stream of consciousness is determined not merely by the sense-impressions which are constantly flowing into it, but also by the individual character of each man's mind. Modern psychology has proved nothing relative to the nature of mind with more clearness than the fact of individual differences, of an almost infinite number and of almost infinite degrees of variation. Minds differ in range, in depth, in quickness, that is, in almost every conceivable way that it is possible for them to differ. Even in the same mind there are constant fluctuations of power.

Memory, too, is a phenomenon of consciousness which requires explanation. In spite of the fact that consciousness is always in a perpetual flux, we do remember actions, which we performed, or, occurrences which happened to us, many years ago.

Consider for a moment the state of consciousness which succeeds a period of sleep, or of unconsciousness induced by anæsthesia, or unconsciousness the product of a blow on the head. While unconscious, I cease to exist, in the parallelist theory. But when I awake, how do I link up my present with my past consciousness? If it is not bound up with the old consciousness, I am a new person. If it is bound up, the old consciousness never really ceased to exist. What we ask of philosophy is an explanation of these unquestioned facts. We ask it to explain, therefore, the unchanging character of the stream of consciousness, a characteristic which is equally as prominent a part of it as its liability to change. But on these points the psychical monist is silent. His only alternative to the soul theory is to declare

writes (*A First Book in Metaphysics*, p. 174): "If we analyze the things we perceive about us, for example, a table, abstracting from them their qualities, or predicates, do we get a remainder, the thing itself or the substance? *Evidently not; a table robbed of its properties, its color, its hardness, its weight, its chemical properties as wood, becomes nothing at all.* The thing is the sum of its qualities and properties in their proper relations, it is not some subject over and above or beneath these predicates, at least not as far as direct sense perception shows."

that the brain is the source of this stability in mental processes—a veritable *reductio ad absurdum* for every thoroughgoing system of Spiritualistic Monism.

Another serious difficulty may be put in the following manner. If the brain is really psychical, and not material at all, how does the monist explain that after death the brain still exists, and appears to the observing eye as not a whit different from the brain of a living conscious person? On the monistic assumption the brain should vanish at the same time as consciousness does. But it does not disappear. It remains the same brain. And as Pratt playfully concludes: "Certainly it is an odd fact that almost the only time when the cortex is ever actually seen is just the time when according to our theory it ought to have disappeared altogether!" [1]

Psychical Monism, moreover, in its assumption of a stream of cosmic consciousness, of which each individual consciousness is but a tiny rivulet, is not only arbitrary and without a vestige of argument to back up its opinion, but is contrary to the overwhelming evidence of each man's individual consciousness which rebels against this unwarranted submergence of his personality in an all-embracing collective world soul. Nor can the idea of a world consciousness be made plausible except on the theory that each consciousness is a substantial unit, whether material or spiritual does not concern us now, which, combining with other units, forms a substantial whole. It is needless to repeat that Monism cannot logically accept any such view.

The last argument brings to the fore what is unquestionably the greatest weakness of Parallelism, no matter what form it may assume. Consciousness, at least as far as we can know and recognize it, is always the consciousness of

[1] *Matter and Spirit*, p. 67.

some one, of a person. It is, therefore, a unit, and its most characteristic note is its personal quality. Parallelism, however, cannot with consistency acknowledge the existence of consciousness except in the form of non-individual, non-personal streams. Such a limitation is fatal, and marks the theory, not only as incompatible with facts, but as a fanciful elaboration in the worst manner of metaphysical hair-splitting.[1]

One more difficulty may be adduced, and that from the distinctive side of the theory, namely, its parallelistic explanation of how mental and bodily processes flow along together, without one in any way influencing the other. Supposing it has been proven that the brain is mental (an altogether illogical assumption as we have already shown) the two series of functions, bodily and mental, cannot coexist at the same moment. But which comes first? Evidently the psychical. Then the psychical causes the physical—no other conclusion is possible. But the only kind of causation known to the psychical process is teleological, while physical processes are governed by the laws of mechanics. The parallelist is therefore compelled to give up all mechanical causality, or to admit that, as a matter of fact, the two series do not really run independently of each other. If he accepts the first alternative, what then becomes of his oft-repeated profession of belief in the validity

[1] Eucken, *Main Currents*, p. 235: "Naturalism constructs and rounds off its conception of the cosmos without taking man into account—and then, with his distinguishing characteristics as far as possible eliminated, he is squeezed in as well as may be! We speak of reaction when we see life being screwed back to some old stage of being already inwardly obsolete. Yet all such attempts to confine life to an outworn historical position are modest indeed compared with this attempt to chain life down to its prehistoric beginnings, and so deprive it of all chance of inner elevation and true development. When contemplated from this standpoint, the whole of human history, with all its characteristic features, is seen to be nothing but a colossal error, a complete departure from truth, since it has more and more deceived man by holding up to him an inner world which is in reality a mockery and a delusion."

and truth of the mechanistic explanation of all physical processes? If he accepts the latter, what becomes of parallelism? As a matter of fact, the parallelist goes a step further and insists that although only the psychical is real, its physical correlate always appears in strict accordance with the principles of mechanical law. A more fantastic world than this, created by Parallelism, it is scarcely possible to imagine.[1]

In conclusion, we may safely assert that Parallelism is a wholly inadequate theory, that it leads to difficulties which are insurmountable, and that it puts a strain on facts which even Animism, in its crudest form, does not surpass. The whole-hearted adherence to mechanism and to evolution by monistic philosophers has prompted many to accept their conclusions. That the universe is governed solely by physical law is a theory which to-day does not demand, nor does it receive, universal assent. Experiment has not proved it a fact, even in the sphere of inorganic matter, to say nothing of the no less wide domain of life and of the mind. Neither is a spiritualistic doctrine incompatible with the theory of Evolution, when correctly interpreted, and limited, as it must be, by facts as we know them.

The defenders of the mind-substance theory are as explicit as any one in recognizing and affirming the dependence of mind on body. Nor has modern physiology changed their view as to the fact or the nature of this dependence. Shall we then conclude that, as far as the body-mind problem goes, philosophy creates, as McDougall calls it, "the dilemma—Animism or Parallelism?" and that it is necessary for us to embrace either one or the other

[1] For a further criticism of Parallelism, read Pratt, *Matter and Spirit*, pp. 48–88. Every student should also read *Body and Mind* by McDougall. This is undoubtedly the best and most complete critique of Parallelism ever published and has done more than any other work to make the monistic position in psychology untenable.

horn of this dilemma? The answer to this question will be given in the conclusion to this chapter. Suffice it to say now, granting Materialism to be impossible, that while we do not argue from the position that because Parallelism is false, Animism must be true, we do contend that, considering the arguments which may be advanced in favor of the mind-substance theory, as well as the replies which may be given to the many difficulties which the theory presents, a very good case may be made out for the common-sense doctrine that both body and mind really exist, and that each one acts upon the other in a way which we shall presently explain. [1]

Interactionism or the Mind-Substance Theory.—The controlling idea in the mind-substance theory is that both body and mind exist, and that they interact. This conception is called the theory of *Interaction.* Now, while it is a very easy thing to say that body and mind interact, it is not so easy to define with clearness the precise modes of interaction. Before examining the theory somewhat in detail, it must be impressed on the student that the mind-substance theory is, first of all, not the result of any general intuition, but is a practical conclusion from experience, upon which it is based and which it in turn endeavors to make intelligible. If the processes of nature and of mind cannot

[1] Ward, *Naturalism and Agnosticism*, Vol. II, pp. 3–93. Also Bergson, *Mind-Energy*, p. 52, who concludes that "common sense is right and that there is infinitely more in human consciousness than in the corresponding brain." Read the chapter "The Soul and the Body," pp. 37–74. It may not be amiss to quote James as to the possibility of arriving at an acceptable soul theory: "Some day, indeed, souls may get their innings again in philosophy—I am quite ready to advocate that possibility—they form a category of thought too natural to the human mind to expire without prolonged resistance. But if the belief in the soul ever does come to life after the many funeral-discourses which Humian and Kantian criticism have preached over it, I am sure it will be only when some one has found in the term a pragmatic significance that has hitherto eluded observation." (*A Pluralistic Universe*, p. 210.)

be adequately explained on any other assumption than that both of them exist as the products of certain substances, then logically we are compelled to accept Interactionism, despite the fact that a completely satisfactory explanation of the workings of these substances escapes us. The theory of Interaction becomes, for practical purposes, true when we realize that the difficulties which it involves are not important enough to force us to discard it.

In the Interaction theory, matter is regarded as extended substance; mind as unextended or immaterial substance. Mind, however, is not to be identified with consciousness. It is a much wider term and corresponds more exactly to what we call the Ego. Now the Ego not only thinks; it wills, feels, moves, eats, and digests. All the manifold activities of the living organism are to be traced back to one cause—the soul. What is this soul? It is an incomplete substance—a substance in that it is a reality possessing self-subsistence—incomplete in that it possesses aptitude for union with another incomplete substance, i. e., the body. While it exists in and "informs," so to speak, the body, it does not necessarily need the body for its existence. As a matter of fact, the soul exists in a body, and together with this body, makes up a unique personality. A person is not a soul alone nor a body alone; a person is a union of both substances, not thrown together in a haphazard or accidental fashion, but in a union so close that one element is necessary to the continued existence of the other as a human person. This union of body and soul we call a substantial union to distinguish it from the many accidental unions which form so large a part of our everyday experience; for example, the color of a book, the size of a piece of wood, the weight of a block of ice. To conceive of substance, and in particular the soul, as an inert mass upon the surface of which ac-

cidents successively appear, as warts do upon a body, is a travesty of the idea of substance. Substance does not exist without accidents, and accidents ordinarily cannot exist without a substance. Similarly, the soul does not exist without thoughts, perceptions, feelings, nor can thoughts exist separated from a thinking subject.

Man, or a person, is therefore a compound of two substances, each incomplete but whose substantial union constitutes a complete substance. He is, however, a *unit*, not two substances in the Cartesian sense, one of which can never act upon the other. A great deal of the misunderstanding regarding the union of body and mind would be quickly dissipated if philosophers did not insist on viewing this unity as an accidental one, as propounded first by Descartes.

Supposing that body and mind are thus united, what is the rôle of the mind in this substantial union? The mind, or soul, is the form or "entelechy," to use the word of Aristotle, of the body. And what is an entelechy? It is the principle which determines the nature of a thing, which when united to a subject, which it actuates, makes up a complete substance of a specific species. Thus the plant has an entelechy, the animal also, and man no less. This form is not only the principle which distinguishes one thing from another; it confers unity and identity on that with which it is united. In a very special sense is the soul the entelechy of the human body. In order to make this clear, it is necessary to say a word about the matter-form theory, a subject which will be treated more fully in the following chapter. According to this theory, every material substance is compounded of two substantial principles—one is called primary matter, the other substantial form. Primary matter is pure potentiality, that is to say, it is capable of receiving any kind of form. It is not extended,

neither is it endowed with any qualities, and therefore it is not a complete substance. It becomes complete only by being united with a substantial form. A familiar example may make this idea more clear. When one eats food, the food is transformed into the living tissue of a person. We do not say new tissue has been created from nothing. Neither do we affirm that the food has ceased entirely to exist. It has been changed into living tissue. That fundamental thing which persists, amidst the many changes involved in digestion, is called primary matter. The substantial form was different at each stage of the process of digestion; the primary matter, however, remained constant.

Thus, in the human organism, the body is conceived as primary matter. It could have become anything, for the simple reason that it is essentially indeterminate. When united with the soul, its substantial form, it receives determination, and becomes a person. Nor does this idea involve a contradiction, granting that the human soul is not material but spiritual. For the soul, as an informing principle of matter, contains in itself, as a spiritual being, powers which are not completely absorbed by its function as the form of the body. Besides bestowing the functions of nutrition, locomotion, reproduction, and sensation upon the body, it still possesses the functions of thought and of willing, and is therefore independent of the body to a great degree. As a substance which subsists by its own inherent nature, it does not cease to exist when the body dies.

Man, therefore, is not two but one nature. All his actions are the actions of the compound, not actions of the body alone nor of the soul alone. A person is not a soul, nor a consciousness, nor a memory. He is a self possessing consciousness; an ego that possesses many

different kinds of operations, none of which is the result of the actions of either the body or soul alone, but of the being as a whole.[1]

It is only fair to acknowledge that though this theory is consistent logically, and does not seem to involve contradictions, nevertheless it is obscure and fails to offer, or even hold out, the possibility of, a complete explanation of the substantial unity of the human person. This obscurity has been a great obstacle to its acceptance amongst philosophers, who, because of the negative nature of primary matter, together with the difficulty there is in imagining how such a thing as substance exists, are loathe to embrace the theory. Substances cannot be seen, felt, or touched; neither does the idea of substance include any characteristic notes by which we are able to distinguish one substance from another. In particular, the relation of body to mind seems to defy imagination. Both materialists and parallelists say it is "inconceivable." Let us frankly acknowledge the difficulty, with the observation already made, that facts do not cease to be facts because we cannot offer a complete explanation of them. An example from science may be given which will throw some light on this

[1] Mercier, *Psychologie*, Vol. II, pp. 247–275. Also *The Origins of Contemporary Psychology*, pp. 294–336.

Thomas Aquinas, the most consistent defender of the mind-substance theory, thus describes the relations of dependence between body and mind: "Secundum naturæ ordinem, propter colligantiam virium animæ in una essentia, et animæ et corporis in uno esse compositi, vires superiores et inferiores, et etiam corpus, invicem in se effluunt quod in aliquo eorum superabundat; et inde est quod ex apprehensione animæ transmutatur corpus, secundum calorem et frigus et quandoque usque ad sanitatem et ægritudinem, et usque ad mortem: contingit enim aliquem ex gaudio vel tristitia vel amore mortem incurrere. . . Anima conjuncta corpori, ejus complexiones imitatur secundum amentiam vel docilitatem, et alia hujusmodi. Similiter ex viribus superioribus fit redundantia in inferiores; cum ad motum voluntatis intensum sequitur passio in sensuali appetitu, et ex intensa contemplatione retrahuntur vel impediuntur vires animales a suis actibus; et e converso ex viribus inferioribus fit redundantia in superiores; ut cum ex vehementia passionum in sensuali appetitu existentium obtenebratur ratio, ut judicet quasi simpliciter bonum id circa quod homo per passionem afficitur." (*De Veritate*, q. XXVI, art. X.)

relation. Like every example, the analogy is not perfect. It is striking enough, however, and may be of assistance to the student who insists on having a concrete example with which to round out his thoughts about a thing.

Suppose two bars of steel, of equal size, weight, etc. One is magnetized, the other is not. The magnetized bar possesses functions which the unmagnetized bar lacks. It is not, however, at least to the eye, different in appearance from the second bar of steel. It does not weigh more; nor has it grown in length after it has been magnetized. Electricity, however, "informs" it at every point, and bestows upon it functions which otherwise it would not possess. Somewhat analogous is the status of a body without a soul, and a body "informed" by a soul. The soul bestows life on the body, it vitalizes the body, it is the source and principle of all the operations which are peculiar to a living body, at the same time adding nothing in weight, size, or appearance to the body, conceived as a separate substance from the soul.

Arguments in Favor of the Interaction Theory.—The arguments in favor of the mind-substance theory may be briefly summarized under the following headings: It is argued that consciousness itself makes one aware of the existence of the Ego. While it cannot tell the exact nature of this Ego, consciousness affirms with absolute certainty that an Ego exists, that the I who sleeps, who thinks, who eats, who walks, is not a number of different subjects, but is one and the same identical subject. Moreover, this Ego continues to exist and to perceive amidst the manifold changes of daily life. Now, if body and mind did not form a substantial and indivisible unit, such testimony on the part of consciousness would be unexplainable. Since perception and intellection are immanent acts, if they were

the products of two different subjects and not of one subject, would not consciousness be compelled to record this fact for us by testifying to the existence of more than one Ego? It is true that consciousness does not tell us in what the Ego consists, but it does inform us, and in no uncertain accents, that the Ego exists.

Moreover, it is not difficult for us to distinguish one thing from another by means of its characteristic activities. Nobody would confound water with stones, nor wood with diamonds. Material things are easily distinguishable from one another on the basis of the different activities which they manifest. Now, if material things are distinct, individual, different from one another, how much more so are minds? If anything has the right to be called a distinct thing in nature, certainly it is the Self. Assuredly the agreements between material things are much more marked than the agreements between any two selves.

Memory is impossible on any other supposition than the permanent existence of an unchanging substance, which is itself subject to many changes. The I who thinks and wills and perceives is the same I who thought ten years ago. No fact of my mental life is more certain than this.

Each man feels himself responsible for the results which attend upon his actions when freely performed. But if acts are the whole of reality, and are not to be attributed to a permanent individual and responsible agent, this sense of responsibility becomes yet another of the great illusions with which human nature is unhappily afflicted.

Purposeful activity is a prime characteristic of the actions of man. In spite of the fact that the body has its proper functions, no less than the mind, all the activities of man conspire to the attainment of certain definite ends, the majority, or at least the most important, of which are spiritual and rational. If man is a mere machine, he is then

the most wonderful machine ever conceived. A superficial consideration of such a marvelous machine as the body-mind machine unquestionably is, leads one to inquire: Does it happen by mere chance that the parts of this machine, so different from one another, continue to work together in a most harmonious way, or is it not necessary to assume the presence of some constant abiding cause which regulates and controls them? To suppose otherwise would be to impose on our acceptance a miracle surpassing all belief. Only on the assumption that body and mind are united in a substantial union can we find an adequate explanation for the persistent, harmonious concurrence of so many otherwise conflicting elements. Complex as these relations are, there can be no doubt in any man's mind that the Self dominates the actions of the body, and uses them for its own, that is, spiritual purposes.

Criticism of the Interaction Theory.—The difficulties which are generally brought against the theory of Interaction fall under three headings. Variations of the same arguments are often met with, but these different forms are easily reducible to the three main contentions which we are now to examine.

It is argued that mental action is only a special form of motion. Experimental psychology by its researches in reaction time proves that psychical processes, since they endure for a certain definite amount of time, are but movements. In the last analysis it will be found that all movements are reducible to one kind of movement, matter in motion.

The same objection is stated in other ways. Physiological psychology has shown the dependence of mind on brain. "No psychosis without a neurosis" is a universally accepted principle of modern psychology.

We may reply to the above objection that no one ever questioned the dependence of mind on brain. It is not the fact which needs explanation, but the nature and extent of the dependence. Neither does the fact that mental acts take place in time necessitate a belief in the intrinsic dependence of mind on matter, unless one assumes that everything which takes place in time is but a kind of movement. This proposition cannot be proved without postulating the very thing we wish to prove, namely, that the physiological concomitants of the acts of mind are identical with the acts themselves.

The second difficulty proposed against Interaction is the one from "inconceivability," an argument which has appeared in a multitude of forms. We may state it thus: it is inconceivable that two substances, so diverse as matter and mind, should ever act upon each other. To which we may reply, that such interaction is inconceivable only on the supposition that our idea of causation, a deduction from our experiences regarding the action of one material thing upon another, exhausts the possibilities of causation and renders any other kind of cause and effect relation impossible. Experience alone can inform us whether one thing can be the cause of which another is the effect. Now, no experience proves that mind cannot act on body. Quite the opposite is true. Daily experience brings to us countless examples of such interaction. I desire to write, and immediately I sit down at a desk and begin the physical operation of writing. I wish to stop writing and take a walk instead, and immediately begin the different movements necessary to walking. It certainly is difficult to explain *how* the will exerts this influence upon the body, but the fact is unquestionable. Nothing, therefore, but a preconceived, a priori, and dogmatic formulation of the cause-effect relation rules out of court the possibility of psycho-physical interaction.

The epistemological argument which is based upon the assumption that only the sensible is knowable is no less arbitrary and dogmatic than the causality difficulty, with which it is closely allied. Neither a priori, and certainly not a posteriori, is it evident that everything which exists must be endowed with material characteristics, otherwise we cannot know them. On no other hypothesis than that all phenomena must be explained mechanically, in terms of extension and motion, can the epistemological objection stand.

The objection from the law of conservation of energy is, of all the objections brought against Interaction, the one which has had the most weight with the advocates of Parallelism.

The unanimous opinion of scientists is that the amount of energy in the universe suffers neither diminution nor increase; it is a constant quantity. One kind of energy may be transformed into another, but the sum-total of the energy, kinetic and potential, of the universe never varies, it always remains the same. Now, the mind either transforms physical energy into acts which we call acts of thought and of will, and it is therefore material; or it produces these acts without using any of the energy in the universe, and therefore increases the amount of energy which, we know, cannot be increased. In either case, mind is material. To which might be added as a confirmatory argument that until a positive experimental proof is brought forward to justify the exclusion of psychical acts from the sway of the law of mechanics, which is universally applicable, we are compelled to explain them in conformity with this law.

Before replying directly to the difficulty brought against Interactionism because it appears to clash with the law of the conservation of energy, it is necessary to inquire as to

what precisely the parallelist means by the words, "the law of the conservation of energy." If he means the theory of Equivalence, namely, that when kinetic energy is changed into another form and then changed back again into kinetic energy, the amount of energy which latterly exists is equivalent to that which existed before any transformation took place, we can confidently assert that neither sensible nor intellectual operations violate that theory. It would be necessary to show experimentally that the amount of energy which is used when the body acts on mind is not made up for when mind, in its turn, acts upon body, to prove Interactionism impossible. This, of course, has never been done. Until these experimental proofs are forthcoming, the position of the Interactionist is unassailable.

If, however, by the law of conservation of energy one means what is ordinarily meant, namely, that the sum-total of the amount of energy in the universe is fixed and that, therefore, mental changes would increase this sum-total, which is impossible without destroying the law, then any one of the following replies is possible. In the first place, Interactionism is certainly incompatible with the law of the conservation of energy if the law is an a priori axiom, in other words, a necessary and universal law of thought. But is it an a priori axiom? It is not. It is a mere generalization from experience and, as such, only holds good to the extent of our experience, which in the case of the law under question, does not extend beyond the field of phenomena in which the experiments upon which it is based have taken place. So limited, the law does not affect psycho-physical interaction in the slightest degree.

Moreover, there is no experimental evidence which will justify the extension of the law of the conservation of energy to include every possible kind of energy. This application

of the law would only be valid on the assumption that the universe is a closed system, the amount of energy of which cannot be increased or diminished. But this assumption has never been proven, and its extension to living organisms is unjustified on any experimental basis. No one questions the value of the law as a working hypothesis in the domain of physical action. But when we apply it to the organic world, and bring under it activities of all kinds, even those of thought and will, we are making an illegitimate extension of the law, unsupported by evidence and made to be so simply because we wish it to be so.

On the other hand, there is no small amount of experimental proof of the most exact character, to say nothing of everyday experience, which proves that mind does influence body. Between the facts of psychology and a mere prejudice, namely, that unless we accept the universality of physical law science becomes impossible, no one need waver in a choice. Accept the facts. Science will not be destroyed because psychical facts are removed from its sway. There still remains to it the physical universe, with all its wonders, and all its unsolved problems. And if this universe can never be explained except we assume the identity of matter and spirit, then perhaps it would be better to leave off trying to explain it altogether and begin again a study of facts as they really exist.

Nor need the demands of the positivist for an experimental proof that the psychical is an exception to mechanical law trouble us. He asks the impossible. Consciousness is the only source of our knowledge of what consciousness is and what consciousness can do. Why, then, look for reasons and proofs in the world of matter? [1]

Our examination of the different theories which offer

[1] For a detailed discussion of the above objections read McDougall, *Body and Mind*, pp. 206–271, and Pratt, *Matter and Spirit*, pp. 130–166.

solutions of the body-mind problem leads to the conclusion that of all the theories studied Interactionism entails the fewest difficulties, and, at the same time, presents the most consistent answer to this vexing question. Its chief merit, it seems to us, is that it harmonizes with facts, both of consciousness and of the physical world. The mind-substance theory is a common-sense view, but one which no philosopher need decry or refuse to accept unless he is determined to be swayed in his views by prejudice rather than by facts. The monistic tendency, which has exerted so tremendous an influence upon modern thought, has served to turn men's minds away from the study of fact to the acceptance of a priori constructions of a more or less unstable character. The time has come to return, both in science and in philosophy, to facts, even though they happen to be the common facts of everyday experience and of every man's consciousness.

Neither is it fair to the theory of Interaction to describe it as an "outworn superstition" or as incompatible with the principles and findings of Natural Science. No student has a higher regard for science, nor for the facts of science, whether they be bodily or mental, than the Interactionist. Without this regard his theory becomes stupidity of a most unalloyed kind. He must study physiology, chemistry, physics if he would even pretend to understand pyschology. But he distinguishes clearly between what psychology teaches him, and what physiology pretends to teach him about mind. Mechanical explanations are well and good in their proper sphere. He cannot see them transferred to the domain of mental life without feeling that something is wrong, that mechanism is assuming a crown it has no right to wear.

A dualistic metaphysics finds itself in congenial, even agreeable, company, when it encounters science, acting and

living as science. But when it meets science, as is often the case unfortunately, masquerading as something quite different, it immediately becomes suspicious, and sometimes ends by being hostile. Dualism has no quarrel with physical science. It allows the natural scientist the widest possible use of mechanical laws and formulæ in the field of the physical. But philosophy would not be loyal to itself, nor to the higher interests of truth, if it failed to protest against the unwarranted practice on the part of some scientists in making the mental a mere aspect of matter, and psychology a branch of physiology.

One more word as to the status of Dualism amongst present-day thinkers. Far from being an "outgrown theory" metaphysical dualism never had so many and such prominent defenders as it boasts at the present time. The reaction against both materialism and monism has definitely set in, as is evidenced by the increasing number of thinkers who are entering the lists in behalf of Dualism. Certainly no one would accuse any of the following of being unacquainted with the results of modern science, yet each one of them has either openly defended Interactionism or felt himself unable to agree with Parallelism in any of its forms. I refer to Lotze, C. Stumpf, Busse, Bergson, Külpe, Ward, William James, Sedgwick, Bradley, Ladd, Schiller, Taylor, Driesch, McDougall, Sheldon, Pratt, and Lovejoy. These thinkers are neither theologians nor writers of popular manuals of devotion. If they can perceive in Interactionism, or if they cannot perceive in Parallelism, a satisfactory explanation of the relations of man to the universe, then it scarcely behooves any one to refer to this theory as an outgrown scholastic superstition.

Interactionism is a sound theory, whether viewed from the side of physical science or of psychology. It is, moreover, the only theory which satisfactorily explains human

personality, and the place of man in the cosmos. If it possessed no other claim to recognition, this alone should bestow upon it a prominent place in every philosopher's speculations, and entitle it to the place of honor in his theories as to the nature of mind and of body, and of the relations of one to the other.[1]

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[1] It may appear hypercritical to find fault with so admirable a book as Professor Pratt's. In it he puts the finishing touches to the work of destroying Parallelism which McDougall so well began. What we cannot understand, however, is why he refuses to go the full distance towards which the facts he cites and logic itself seem to impel him. Pratt stops short with what he names "a dualism of process," which is "not necessarily a dualism of substance" (p. 183). But how is it possible to conceive one without the other? On page 181, in describing the self he defines it as a substance, when he writes: "The self then is a genuine reality with a unity and identity of its own, a center of influence and energy, and not to be confounded with a mere sum of qualities or of states."

CHAPTER V

THE PROBLEM OF LIFE

The problems which we have dealt with up to this point had to do with the universe in its widest aspects. Thus, we have traversed the different theories which attempt to explain the nature of reality. Our examination seems to prove that after a most careful scientific and philosophical analysis, the belief of the plain man as to the dualistic nature of reality is justified. Everyday experience, no less than philosophy, confirm us in our acceptance of a dual principle in nature. Dualism, it is true, involves difficulties, but the difficulties are not so serious that they necessitate a revision of the fundamental doctrines, upon which this philosophy is based. The theory of Interaction also seems to be, considering the present state of our knowledge, a sufficiently reasonable explanation of the relations of body to mind. No argument yet advanced by Parallelist or Materialist is strong enough to force us to discard a doctrine which explains so well our experiences, and is in such complete harmony with them.

But these problems, with the solutions we have offered, do not by any means exhaust the questions which arise from our contemplation of the universe as a whole. Admitting that body and mind exist, and even interact, the philosopher seeks a more exact explanation than that already proffered as to the nature of this interesting relation. No exhaustive study is required to reveal to us the existence of different kinds of substances, whose characteristics are so marked

that it is impossible to confuse them, one with the other, and whose activities are, at least at first glance, diametrically opposed. Nobody would mistake a stone for a plant, nor a chair for a human body. Neither science nor philosophy is needed to inform us that these things are very different from one another. And this difference, or better, series of differences, is evidenced by the diverse ways in which things operate. The non-living acts quite differently than the living. Amongst living things, there are grades of activity, so clear-cut and distinct, that no ordinary observer would think of asserting them to be one and the same. But, perhaps, after a detailed and critical study these differences, which appear so far-reaching, may be discovered not to be as vital as first appearances naturally lead us to believe. Perhaps everything at bottom is one, and what we think of as individual and irreducible activities are not so at all. The actions of man seem to be quite different from those of a lower animal, a plant, a stone. Shall this belief be justified after a searching examination of its value and the arguments upon which it relies?

The history of philosophy proves that all men have not accepted as final the generally received belief as to the profound differences which exist amongst things. Some philosophers have seen these differences as merely accidental manifestations of a reality, which is in the last analysis, one. The so-called qualitative differences, which mark off things from one another in such a way that they cannot be explained by a single formula, are not imbedded in the nature of things. Upon investigation, they will be found to be negligible differences, and not primary at all. As a matter of fact, qualitative changes are superficial. They are the seeming reality, it is true, but a thorough analysis of the quality and the activities of bodies reveals to us the truth that quality is really nothing. On the other hand, quantity

is of the essence of things, which differ from one another in the amount of mass which they possess or of motion which has been communicated to this mass. Everything, therefore, comes under one law, and can be explained in terms of a single principle. This conception of the universe we call *Mechanism.*

But Mechanism is not the only possible answer which can be given to this problem. A group of thinkers rebel against the reduction of all reality to one kind, and assert that Mechanism is an insufficient explanation of how things act upon one another. The world is not a machine, in the exclusive sense that a mechanical explanation is adequate for every kind of cosmic experience. There exist phenomena, we call them vital phenomena, which cannot be explained by the laws of mechanics governing lifeless matter. To understand adequately vital phenomena, it is necessary to construct another series of laws which will include aspects and activities of living matter not explainable in physico-chemical terms. The vitalist does not deny that matter can be, and should be explained, solely by means of mechanical principles. He opposes, however, the extension of the mechanical category to the realm of the living, which he looks upon as another and different kind of reality than the non-living. This view of the world is, therefore, vitalistic and its philosophy is called *Vitalism.*[1]

Mechanism.—The mechanical theory has had a long history, dating from the days of Democritus. The term,

[1] Driesch puts the problem thus: "*Is organic individual wholeness produced on basis of a machine,* i. e., *by processes which, though arranged in a special given manner, are in themselves inorganic processes, as known from physics and chemistry, or are there in the organism whole-making processes* sui generis, i. e., *processes not reducible to the forms of inorganic becoming?*

"This, then, is the central problem of biology proper: *Mechanism or Vitalism?* if by 'Vitalism' we mean the possibility, merely negative at first, that there *may* be processes in the organism which are *not* of the machine-like or 'mechanistic'

too, has been accepted in many meanings. Principal amongst these has been the one which is generally called Atomic Mechanism or Chemical Atomism, the underlying idea of which is that all substances are composed of atoms which never exist alone but in groups, called molecules, the activities of which are to be explained according to physical and chemical laws. The other leading use of the term is to designate a philosophical doctrine which, transcending the empirical data of chemistry and physics, strives to build Chemical Atomism into a theory of the universe. It is in this latter sense that we will treat of Mechanism, namely, as a philosophic view which regards the universe as a machine.

Mechanism as philosophy attempts a construction of the universe solely in the terms of mechanics. Everything is at bottom matter, that is, the atoms of simple bodies are all homogeneous, and consist of mass with its attendant function of motion. Bodies, therefore, are composed of molecules in motion. These molecules act according to the blind laws of necessity. There is no such thing as purpose, end, adaptation, or freedom in nature. Such conceptions are pure fiction. When correctly understood, all bodies, living and non-living, fall under the universal laws of mechanical explanation. While it is quite true that it is very difficult, in the present state of our knowledge, to reduce all the phenomena of both living and non-living bodies to a single formula, such must undoubtedly be our final objective. This task, to which science is committed, is something more than a mere pious aspiration. Continuity demands some such unified conception of the world.

In the mechanistic theory there is no real difference between forms of matter. All obey the laws of motion. A

type, and which may be said to be 'teleological' or purposeful in more than a merely formal sense." (*Problems of Individuality*, p. 4.)

stone cast from a building will reach the ground at the same time as a human body of an identical shape and weight, all other conditions being equal. The law of chemical affinity, the law of gravitation admit no exception of any kind whatsoever. It must not be supposed, however, that Mechanism fails to recognize the different degrees of complexity which exist amongst bodies. Living bodies, and especially the human body, are extremely complex. The atoms, though, work in exactly the same fashion and are understandable on the same principles, whether the body be living or not. Everything is mass in motion—no other factor is required to explain the activities of nature.

Of course, our ignorance of complex organisms prevents our predicting what they shall do, given certain circumstances, with the accuracy and finality with which we can predict the activities of well-known chemical compounds. This limitation, however, is not due to the falsity of the mechanistic theory, but to the inadequacy of our present-day knowledge. If we possessed a comprehensive knowledge of physiology, the complex functioning of the human body would present no mysteries for mechanical science. Not only would it understand why this particular response follows upon this given stimulus rather than on another, but it would be able to predict with unfailing accuracy just what response must follow. So far-reaching, in fact, are the principles of mechanics that all the facts of psychology, of sociology, and even of ethics must be brought under its spread. Human acts, and human intercourse, complicated as they appear to be, are really very simple at bottom and yield to a mechanistic interpretation, tentative, of course, at the present time, but approaching more nearly to a complete explanation as our knowledge of matter and its activities is deepened and clarified. If it were possible to know every atom of the universe, together with its boundings and re-

boundings, we could safely predict all the phenomena of nature, including the fate of every individual man, the rise and fall of empires, the future of this world, the transformation of the solar system. Nothing escapes the sweep of the laws of mechanical necessity, neither on this earth, nor in the waters underneath the earth, nor in the heavens above.

Mechanism, therefore, is an all-embracing science as well as an all-embracing philosophy. Since its underlying principle is to interpret all higher phenomena of a complex order in terms of lower phenomena of a simpler order, it progressively reduces the fields of the higher sciences to those of a physical and mechanical character. Ethics, psychology, and sociology thus become aspects of biology, which, in its turn, derives its validity and explanations from chemistry or physics. These latter sciences, when analyzed, turn out to be but phases of mathematics, which is the ground science. All phenomena are, therefore, referable to mathematics, and can be stated not only in terms of mathematical equations but can only be understood fully in that way. The universe, in this conception, becomes a closed system, from which everything but mass and motion are banished. All such categories as end, purpose, value, and causes, other than efficient, are useless, and serve no purpose but to hamper a scientific and an ultimately attainable mechanistic explanation of the universe.

Neo-Mechanism.—The mechanistic interpretation of the universe, as outlined, is frankly materialistic and monistic. Historically, Mechanism has always stood in very close relation with both Materialism and Monism. Since Materialism has suffered greatly in prestige in recent years, there has followed a loss of ground on the part of Mechanism as well. The scientists remain for the large part mechanistic, and many of the thinkers, who inhabit the border-land be-

tween science and philosophy, are no less openly favorable to the theory of Mechanism. But the number of mechanists of an intransigent character, like Loeb, has greatly diminished, especially in biology. To-day Mechanism, no less than Materialism, has been considerably toned down, and its followers seem less sure, or, at least, less outspoken, in pressing its claims as a final and authoritative explanation of all reality. There has thus arisen what has been called the *New Mechanism*. However, there is no great difference, certainly no difference of fundamental principle, between the neo-mechanists and the mechanists of the nineteenth century. Both agree that the atoms of which all substances are composed are essentially homogeneous. They differ in this, that the neo-mechanists are less dogmatic in asserting that every kind of motion can be defined in terms of a single substance, the nature of which they make no attempt to define. Logically, however, both schools are one, for it is manifestly impossible to introduce qualitative differences between substances which support a reality which is one and undifferentiated, namely, motion.

Another characteristic of Neo-Mechanism is its lack of the dogmatic tone which was so prominently displayed in the older Mechanisms. Present-day mechanists frankly acknowledge that the mechanical explanation has not answered all questions, nor do they claim that it ever will be able to do so. The explanation of all phenomena in terms of motion is a possibility, and should be the goal of science. This much we are compelled to recognize. But it is one thing, they claim, to acknowledge our ignorance, and another to state that this ignorance is final, that a mechanical explanation which all can accept lies without the bounds of possibility. We must have faith in the mechanical theory. By the use of it science has gained some of its most notable victories. Moreover, it is purely arbitrary to nar-

row the extension of this theory to non-living matter. All Mechanism asks is a chance to show what it can do in the field of biology. To prejudge is both arbitrary and unscientific.

Mechanism may possibly be false; it is faced with immense difficulties; for some it even involves serious contradictions. In spite of all this, it must pursue its even course. To abandon Mechanism because it does not explain everything is to destroy the foundations of all science and to throw us back into an intellectual atmosphere in which demons of good and evil reign, and chance, not law, governs their and our actions. Surely, the progress of science in the last century is argument enough for any man to hold fast to a mechanistic interpretation of this world. In the future, as Fullerton remarks, "the steady growth of science encourages those who are imbued with the scientific spirit to hope that, in our knowledge of nature, discontinuity will gradually give place to continuity, and that there will become more and more clear before our eyes an orderly mechanical system, the successive stages in the evolution of which will not have to be accepted as inexplicable fact, but will be seen to be the appropriate steps in a series of changes, the inevitable succession of which we may infer with confidence, and which we are unable to comprehend only where we are still hampered by our ignorance." [1]

Energism.—Amongst recent thinkers, especially in France and Germany, Mechanism has been supplanted by *Energism*. The central idea of the theory of Energetics is that energy is the only true reality existing in this universe. Matter does not exist. It is a mere "episode" of energy, something which carries along with it energy, appearing to us under the shape of mass, weight, and volume. The essence of

[1] *A System of Metaphysics*, p. 227.

energy is twofold—quantity and intensity—and although energy is multiple, it is capable of being transformed from one species into another. Electrical energy may be transformed into heat energy, or chemical, light, gravitation, nervous, etc. Energism thus reintroduces into nature the principle of quality which was banished therefrom by the different theories of Mechanism. As to the ultimate nature of energy, Energism is silent. As a scientific hypothesis it goes no further than the assertion that energy is energy; what lies behind is a matter for metaphysical speculation.

That Energism possesses many advantages over the older mechanical ideas, and is a more exact theory of nature, few will deny. Its weak point is the way in which it exaggerates the rôle of energy in the universe. Space, extension, mass, time, and distance, for example, cannot be conceived as forms or elements of energy without doing them violence. Moreover, matter is not gotten rid of by analyzing it into mass, weight, and extension and calling these attributes energy, as Ostwald does, thereby rendering the idea of matter useless. We hasten to ask: How do these qualities continue to exist and influence one another, if they are not bound together by some connecting link? It seems necessary to postulate the existence of some ground which combines these elements into a whole if we ever hope to understand how they can act together.[1]

Arguments in Favor of Mechanism.—Like so many other terms, Mechanism has not had a constant meaning. Often it is used in its most rigid sense; again, its meaning is softened to include actions other than the purely mechani-

[1] For an exposition of the theory of Energism read Ostwald, *Energism;* Duhem, *L'Evolution de la Méchanique;* Rey, *L'Energetique et le Mechanism;* Mach, *Science of Mechanics*, trans. by M'Cormach. For a critique, Nys, *Cosmologie*, pp. 574–589; Mercier, *Manual of Modern Scholastic Philosophy*, pp. 139–143; Ward, J., *Naturalism and Agnosticism*, pp. 155–181.

cal, or to comprehend but a portion of reality.[1] That a partial Mechanism can be defended scientifically, we shall see later. Here we are discussing only the theory which claims to be an exclusive explanation in terms of mass and motion of the universe both physical and mental. This might be called *Pure Mechanism.*

The arguments advanced to prove the truth of Mechanism are, in the main, of a nature extrinsic to the problems involved. A priori, it cannot be maintained, and all are agreed on this point, that the universe must be explained mechanically. However, the fundamental conceptions of science are of such character that, unless we assume the truth of Mechanism, we are obliged to admit many incoherencies, no less than unbridgeable gaps, in the continuity of scientific knowledge. The argument "from prejudice" is nowhere more patent than in the field of mechanical explanation. The majority of scientists assume the mechanical theory to be correct because they wish it to be so.

In the first place, mechanists argue that their theory is scientific in contrast to the mediæval and "romantic" idea which would explain things in terms of demons, or of some purely metaphysical principle, like the soul, entelechy, or *élan vital.* Now we cannot accept external interference of any kind in the orderly workings of the universe unless we are ready to sacrifice all hope of ever attaining a strictly logical and scientific explanation of reality. Continuity demands that all the sciences be reducible to a single science whose principles are determined, that is, to mathematics. To explain a thing on the basis of some hidden quality, or so-called "form," is simply to throw dust in our own eyes. It does not add a whit to our knowledge to assert that man is man because he possesses a substantial form, the soul, or

[1] See Broad, article "Mechanical Explanation and Its Alternatives" in *Aristotelian Society Proceedings*, Vol. XIX, for an analysis of the different ways in which the term "mechanism" can be understood.

that electricity and heat differ, because of differences in their underlying substances.

Moreover, Vitalism is productive of mental lethargy in this, that, like a drug, it soothes us to sleep in the presence of problems which cry out for more than a purely verbal solution. Mechanism, on the other hand, is a vigorous manly tackling of all problems, not a reveling in an absurd logomachy. The mechanistic hypothesis may not solve all questions, but it has at least the hardihood to attack all. If it had done nothing more than free science from the absurdities of final causes, souls, entelechies and such stuff, it would have conferred a priceless boon on human knowledge.

To the above criticism we may reply, that no one can question the good results which have followed the introduction of the mechanical explanation into the natural sciences. Mechanism has helped to liberate physical science from the domination of anti- or, at least, non-scientific ideas. For this reason, and rightly, it has been called the "Magna Charta" of science. And this is no small claim to honor. But we must beware of exaggerating the place of Mechanism in the philosophy of nature by according it a place out of all proportion to its accomplishments. As a "charter of autonomy for the physico-chemical sciences" [1] its place is secure; as an exclusive philosophy of nature, there are many grave reasons for disputing its pretended supremacy. The argument, therefore, is purely negative, and in default of positive reasons it neither proves Mechanism true nor false. It does not even create a prejudice in its favor.

Another argument in favor of Mechanism is deduced from the fundamental laws of applied logic. An explanation, it is contended, which purports to be more than a mere tautology, must explain, that is to say, it must pass from

[1] Hoernlé, *Studies in Contemporary Metaphysics*, p. 179.

the better known to the less well-known, and not vice versa. Science is not a mere description of phenomena. It attempts to explain why and how they occur; and this can be done in no other way than by reducing any unknown phenomenon to its known antecedents. Mechanism takes precisely this attitude. In the face of a phenomenon which seems to defy explanation it does not go in search of hidden meanings or outside forces. Within the thing itself is its own explanation, and we can find that explanation if we diligently search for it where it should be sought, namely, in like phenomena.

Final causes are useless as explanations. Setting aside the many illusions which naturally arise from the injection of the personal equation into all our statements relative to ends or purposes, these final causes are not *versæ causæ* in any true sense of the word, and serve us no better than "forms" in explaining things. What is a final cause? It is the end for which a thing is done. But the end may not exist until after both the efficient cause and its effect have ceased to exist altogether. The final cause, therefore, cannot be a cause in any sense of determining what shall be. In order to influence the effect it would have to be a cause before it exists, which is manifestly absurd.

Moreover, final causes teach us nothing about the nature of things. To say that an ear is an ear because it is made to hear tells us nothing about the ear as a physiological structure, or what part it plays in the function of hearing, to say nothing of a hundred other things we wish to know when we ask the question—What is the ear? Final causes, therefore, give us no information about what a thing is, how it works, and what its relations are to other things. Such explanation is no more effective than the so-called formal cause which explains a thing by itself.

For the above reasons the mechanist contends that science is helpless before phenomena if it attempts any other ex-

planation than one in terms of efficient causes. The complex must be explained by the simple; the new by the old. Now, at the bottom of all activities we find mass and motion. This is true of biological, no less than of physical and chemical phenomena. Of course, it is possible to explain the facts of life in terms of purpose, or motive, or character. But such explanation is wholly unsatisfactory, as every one knows. Until we have reduced all phenomena, not excluding vital, to a physical basis, we shall eternally lack a complete understanding of them. There is no gap in the order of nature, and none can be introduced without throwing us immediately into the domain of the misleading, the tautological, of the explanation which does not explain.

It is very difficult, we admit quite frankly, to give an adequate reply to the above objection, compounded as it is of misrepresentation, truth, and half-truth, without going too far afield. Briefly, however, we may state that the mechanistic conception of formal and final causes is a gross caricature of these philosophical concepts. No one denies that the complex must be explained by the simple, nor that many phenomena are explainable in the terms of Mechanism. Neither can we deny that formal causes are not explanatory causes. To explain a thing by analyzing it is to do away with its "form" entirely, which is a synthesis of all the qualities of a thing. Form means unity, individuality, and you destroy this in every process of analysis. Because "forms" do not explain is no reason for denying that they exist or for contending that they are useless.

Final causes, as conceived by mechanists, are not final at all, but efficient causes. To assume that the only kind of cause which can exist is the efficient cause, and then to argue that, since final causes do not determine an effect in the mode of efficient causes, they cannot exist, is certainly strange logic. But is there one, and only one way of deter-

mining an effect, that is after the manner of the "efficient" cause? Experience rebels against any such assumption. Certainly in the world of man, if not in the physical world, ends and purposes play a determining rôle. The universe, as we know it, is not made up exclusively of *results*, and by the universe we mean, as we hope to prove below, not merely the universe of consciousness, but of nature as well.

No vitalist criticises the validity of the explanations based on mechanical law for certain restricted realms of nature. He disapproves, however, the extension of Mechanism to the whole field of nature and of knowledge. While sympathetic with the ideal of continuity in scientific explanation, he feels that this continuity must bow before facts which refuse, and stubbornly so, to be bound within the limits of a narrow mechanical standpoint. The philosopher, no less than the scientist, accepts the principle that causes must not be multiplied without a sufficient reason. This is primary in every discussion relative to the cosmos as a whole. But in the presence of ends and purposes in nature, and nothing seems more undeniable than that they exist, the philosopher makes over his theory of continuity and shapes it to meet facts rather than have the facts meet his theory. No thinker, on purely a priori grounds, wishes to narrow the sweep of the mechanistic interpretation of the universe. He must insist, however, on Mechanism explaining in mechanical terms all the facts of the cosmos, physical, chemical, biological, no less than psychological, before he can consent to banish everything but quantity from this world.

Again, it is argued by the mechanist that his theory, in spite of its many defects and the difficulties which it involves, has given us the only really consistent and synthetic view of the universe yet formulated. This consistency is proved by the fact that it actually succeeds. The history

of modern science is but the record of the progress of scientific knowledge in terms of the mechanistic hypothesis.[1] Not only has it succeeded in the fields of dynamics, physics, and chemistry; but by freeing biology from such concepts as design, purpose, and end, it has created at last a true science of life. It has explained the phenomena, even the most complex, of biology as the results of certain definite physical and chemical causes. What is more, the truth of these explanations is evidenced by the fact that we can even predict what an organism will do, given certain conditions. This forecasting of events, as a result of our investigation of their causes, speaks volumes in favor of Mechanism, and effectively silences any doubts which may arise as a result of the limitations which our insufficient knowledge places upon the mechanical hypothesis.

No one questions the successes of Mechanism, nor does the recognition of entelechies, souls, or design in nature do away with the mechanical explanations of physics, chemistry, or even of biology. That the mechanists in their enthusiasm often over-state the successes of their theory, the history of science proves only too well.[2] In spite of

[1] Paulsen states the difficulty thus: "Let us not be deceived! Natural science will never again be decoyed from its path, which seeks a *purely physical* explanation of *all* natural phenomena. There may be a thousand things which it cannot explain now, but the fundamental axiom that these too have their natural causes and therefore a natural-scientific explanation, will never again be abandoned by science. Hence *the philosophy which insists that certain natural processes cannot be explained physically without a remainder, but necessitate the assumption of a metaphysical principle or a supranatural agency, will have science for its irreconcilable foe.* The two can live in peace only on condition that philosophy absolutely refrain from interfering with the *causal explanation* of natural phenomena, and allow natural science quietly to finish its journey." (*Introduction to Philosophy*, p. 161.)

[2] Broad, in *Proceedings of Aristotelian Society, 1918–1919*, writes apropos of this assertion: "I do not think that pure mechanism deserves to shine in the light reflected from the successes of the atomic theory in chemistry or of the electron theory. The atomic theory contradicts homogeneous mechanism and makes no assumption in favour of pure mechanism. It is useless to say that perhaps the differences between an atom of oxygen and one of hydrogen are merely differences between the number and configuration of two different groups of precisely similar particles, whose laws are mechanically analysable. Perhaps they are. But since chemistry has no

their exaggerations, all thinkers are willing to acknowledge that the scientific approach to certain problems is undoubtedly mechanical. We definitely associate, and rightly so, the mechanical with the scientific temper of mind. But from this admission to the exclusive use of the mechanical explanation for every single kind of reality, is a far cry.

Nor does the fact that we can predict phenomena on account of the knowledge of causes obtained through mechanical investigations, argue to the truth of Mechanism. The rôle which prediction plays in present-day science is strangely and persistently over-emphasized by many scientists. From their statements one would gather that the peculiar function of science is to be able to predict, not to discover causes. Prediction, however, is merely the by-product of scientific generalization. What science is intimately concerned with is the discovery and formulation of laws, not the prediction of future events. In the field of applied science, the function of prediction enjoys a well-merited position. It has nothing to do with pure science as such, which can very well dispense with all predictability, and still remain the source of proved incontestable knowledge. As Hoernlé, who analyzes prediction so well, remarks: "Prediction is by no means identical with deduction in general. It is a special case of deduction, possible only under special conditions." [1]

need to make any assumption on the question one way or the other, the success of the atomic theory up to the present can have no tendency to support this view, and therefore can reflect no credit on homogeneous or pure mechanism. Again, the fundamental laws assumed on the electron theory are not of the nature of central forces, so that whatever credit the success of the theory may reflect upon homogeneous mechanism it reflects none upon pure mechanism."

[1] *Studies in Contemporary Metaphysics*, p. 152: "It is a mistake when the typical formula for a scientific law:—If *A*, then *B*, is read off as essentially a prediction:—If *A* happens, then *B* will happen; or, If you do *A*, then you will get *B*. Fundamentally, a law is a statement of a functional correlation between variables. 'If *A*, then *B*' means '*A* implies *B*,' and there is no exclusive or essential reference in this formula to the anticipation of future events. It would, moreover, be wholly false to restrict science to a preoccupation with the future. Science is as much

The appeal to continuity begs the whole question by assuming that vital processes can be explained in physico-chemical terms. If the differences between the organic and inorganic, the living and non-living, are merely differences of degree, that is, mathematical differences, of course it is possible to understand them as diverse cases of one and the same principle. But what if they are not mere variations of mass endowed with motion? In this case the differences will not fit into the neatly ordered mathematical categories which have been framed to hold them, and either one of two things must happen—the forms must be changed or the facts whittled down.

Again, we may ask whether the idea of continuity, which for many scientists has become a veritable monomania, demands a construction of the sciences on the basis that the principles and laws of one particular science must always and in every instance become the starting point of the other. Leaving to one side the consideration that little, if any, progress has yet been made towards such a comprehensive scheme or organization of the sciences, we may even question with propriety whether the ideal is within the realm of possibility. That the universe is an ordered whole seems to be a rational assumption, but that this assumption requires the explanation of all its manifold differences in physico-chemical terms is more than questionable. Facts are against the assumption.

interested in the past as in the future, and its problems as often take the form of discovering the causes of given effects, as of predicting the effects of given causes. And, lastly, the treatment of an implication as a prediction is false, not only to the character of an implication, but also to the character of a prediction. Prediction, in the proper sense, is not hypothetical, but *categorical*. You do not predict so long as you merely say, If *A*, then *B*. But you do predict when you say, Here is an *A*, and in virtue of the law, If *A*, then *B*, I infer that there will be a *B*. A law, in short, is not a prediction, but may make a prediction possible when applied to a particular case, or to put it differently, when a definite value is given for one of the correlated variables. And even then the correlation must be of the kind which involves temporal sequence or order."

Driesch has proved conclusively that biology presents a multitude of facts which defy the possibility of mechanical explanation. To seek to explain them mechanically is to close one's eyes to their most characteristic qualities, namely, that they are the functions of living things. A true and consistent explanation of the universe cannot result from a theory which continues to ignore the heterogeneity of nature, and, in place of its apparent and evident discontinuity, insists on erecting everything upon a purely theoretical continuity. To quote Hoernlé once more: "A unified theory of nature does not require the reduction of all universals to one kind, or the restriction of all variables to one type of values. We have laws correlating geometrical, physical, chemical phenomena among themselves in each group, as well as laws correlating phenomena of one group with those of another. There will then result a scheme, or an order, in which differences are preserved and 'saved,' instead of being 'reduced,' and in which a unified theory is achieved by the correlation of different types, or groups, or levels, of phenomena which follow also among themselves each its own characteristic laws." [1]

Criticism of the Mechanistic Theory.—The difficulties which are advanced against the acceptance of a purely mechanistic interpretation of the universe are so grave, and so important, that in recent years even the overweening confidence of many scientists in their pet theory is beginning to be dissipated. Few, if any, philosophers are theoretical mechanists; and while many scientists still cling to the mechanical hypothesis with grim tenacity, some of them are beginning to sense its inadequacy without experiencing the much heralded corresponding feeling that, without Mechanism, science is doomed. Broad

[1] *Studies in Contemporary Metaphysics*, p. 157.

states the present situation in the following terms: "So far as I am aware, practically no scientist, whatever may be his theoretical predilections, actually works with the theory of pure mechanism (which indeed has begun to acquire a faintly Mid-Victorian flavour like crinolines, backpartings, and the philosophy of Mr. Spencer). Even homogeneous mechanism is hardly used by any one; the electron theory, which gets nearest to it, has its positive and negative problems." [1]

In recent controversies anent the problem of life, it has been customary to wage the battle on the field of biology alone. Both mechanists and vitalists appeared to take for granted that Mechanism was impregnable in its special camps of physics and chemistry. But later thinkers have carried the battle even to the enemy's fortified camp, and have gained notable victory after victory. This is as it should be. Mechanism, as a philosophy, is an empirical generalization based on the study of certain physical and chemical facts. But does it interpret these facts correctly, and does it interpret all the facts? A theory is justified, and assumes a rightful place in science only on the condition that it investigates all the facts, and, what is more significant, interprets all correctly.

Mechanism, as science, offers a host of difficulties. It does not explain the diversity and constancy of atomic weights; it has no sufficient theory for the tendency in bodies of a like nature to make certain definite combina-

[1] For a criticism of Mechanism from the idealistic point of view, read Ward, *Naturalism and Agnosticism*, Vol. I, pp. 92–302; from the biological standpoint, Driesch, *Science and Philosophy of the Organism*, Vol. I, pp. 76–240; from the standpoint of philosophy, A. Balfour, *Foundations of Belief;* also Nys, *Cosmologie*, pp. 44–164; McDougall, *Body and Mind*, pp. 235–271. Symposium, 'Are Physical, Biological, and Psychological Categories Irreducible?' in "Life and Finite Individuality," *Proceedings, Aristotelian Society, 1918;* Henderson, *The Fitness of the Environment, The Order of Nature;* Haldane, *Mechanism, Life and Personality*. For the history of Mechanism, Merz, *A History of European Thought in the Nineteenth Century*.

tions, that is, for chemical affinity; the relative constancy which atoms manifest when uniting with one another finds no explanation in the laws of motion; the recurrence of chemical species, the peculiarities of chemical compounds are other phenomena for which Mechanism is an admittedly insufficient theory. In the physical realm, Mechanism cannot explain the process of crystallization, nor the remarkable regularity with which bodies manifest certain salient characteristics despite the almost infinite number of changes or transformations which they undergo. From the mechanical side, Mechanism fails to explain the assumptions upon which is based the kinetic theory of gases, or to give a consistent idea of what weight is, because it eliminates from matter the idea of force and substitutes in its place that of motion. And, it must be noted further that, not only is Mechanism incapable of explaining many of the difficulties, but that the explanations which it does give of other facts seriously distort them and introduce into our conceptions of the universe a series of theories which, because of their contradictions, it is impossible to accept. Nys concludes his searching criticism of the mechanistic theory from the standpoint of its inability to answer certain fundamental scientific questions with the following well-merited rebuke: "On rejette les forces occultes, sous prétexte qu'elles ne tombent jamais sous les prises de l'expérience directe. Vraiment, sont-ils moins occultes ces mouvements inconstatables par lesquels on prétend concrétiser le pouvoir virtuel de la pesanteur, de l'affinité chimique et en général de toutes les forces de la nature?" [1]

When we pass to the field of biology, the difficulties increase with startling frequency.[2] No one, of course, ques-

[1] *Cosmologie*, p. 140.

[2] "Astronomy, physics and chemistry can infer causes from given effects as definitely and confidently as they can derive effects from causes. But in the organic

tions the value of the innumerable researches which have been made into the physiological concomitants of life and whose purpose has been to reduce them all to certain fundamental physico-chemical processes. That these explanations are not always sufficient, Driesch has shown beyond the peradventure of a doubt; that they bring us no closer to a formula which will explain life every fair-minded thinker must admit. Many biological processes defy any kind of generalization in mechanical terms. The phenomena of morpho-genesis, the physiology of movement, many facts of morphological and physiological adaptation, the striking characteristics of inheritance, when viewed cumulatively, yield a mass of difficulties which render an exclusive acceptation of pure Mechanism impossible. The mechanico-biological viewpoint is an unnatural one in this, that it abstracts altogether from the very category which differentiates a living body from a non-living body. For example, a study of the place which the three most common chemical elements, oxygen, hydrogen, and carbon, hold both amongst animate and inanimate things is no proof of the chemical nature of life. Bio-chemistry, in its study of vital phenomena, abstracts from life; it disfigures, therefore, these phenomena to that extent. From its abstractions, biology must always return to the world of actual fact, that is, to the individual, under the penalty of setting up an abstraction for reality. The trouble with Mechanism is that it fails to perceive that life, mind, end, purpose, etc., are as necessary, in fact more necessary, for a complete

world the case is very different. Here it is always the effect that is given,—whether we term it 'life' or the 'preservation of the individual' or the 'preservation of the species' or 'form.' The factors which produce the effect are, on the other hand, so manifold and so inconstant that we can never argue with any certainty to a *particular* causal connection. A simple mechanistic theory of vital phenomena is consequently both impracticable and valueless, however sure we may be that, at bottom, organic processes are as universally subject as inorganic to the law of cause and effect." Külpe, *Introduction to Philosophy*, p. 149.

understanding of a living organism than are any number of physical or chemical processes, and that because these processes always occur, under certain set mechanical conditions, is no reason to conclude that they are purely mechanical.[1]

Another difficulty arises from what has been called the irreversibility of cosmic events. Viewed historically, nothing turns back to a state or condition which it formerly occupied. Thus, the fruit does not return to the flower, the flower to the bud, the animal to the embryo, etc. Motion, on the other hand, is essentially reversible. If an object can traverse the distance from x to y, it can as easily go back over the same space and traverse the distance from y to x. Everything, therefore, cannot be motion, and this objection receives added force in the face of certain phenomena of the living organism, in whose case reversibility is not only improbable but manifestly impossible. It is inconceivable that we should see something before the object is present to our eyes, or that a leg be amputated before the surgeon applies his knife.[2]

The doctrine of motion itself, as elaborated by mechanists, cannot be maintained without doing violence to the correct idea of movement. The place of motion has been unduly emphasized by them and, in particular, is it an exaggeration to maintain that every change which takes place in the universe is but an aspect of motion. While it is true that the activities of all bodies are accompanied by movement, thus making possible the science of mathematical physics, it must, at the same time, be acknowledged that matter also possesses properties which are essentially qualitative in character, and which cannot be brought within the purview of a purely mechanical explanation.

[1] For an exhaustive statement of the biological difficulties involved in Mechanism, consult Driesch, *Science and Philosophy of the Organism*, Vol. I.

[2] de Munnynck, Article "Mechanism," *Catholic Encyclopedia*, Vol. X, p. 101.

But it is as philosophy that Mechanism exposes itself to the gravest objections. In the first place, if the complex is to be explained by the simple, then Mechanism stands convicted as an unsatisfactory hypothesis for the reason that to understand even perfectly, the elements of a complex, gives us *eo ipso* no understanding of the complex. There still remains to be explained the combination of these elements into a whole, the unity of the complex. The complex is by no means the same as the compound of its simple elements. This is an elementary distinction which most mechanists fail to take into consideration. To suppose that every new phenomenon can be reconstructed in terms of an old phenomenon is to misconstrue the most salient feature of the former, namely, its novelty. The new is *not* the old, and it cannot be reduced to a simple elementary law of which the novelty is but a functional relation. If this theory has any great advantage in the way of a real explanatory cause over the so-called formal or final causes, we would like to see that advantage pointed out.

According to the most consistent defenders of final causes, they are purely metaphysical ideas and have no place as explanations in science. One thing is assured. They do not distort and disfigure reality as do efficient causes, as understood by those who believe them the sole causes worthy of consideration. No one wishes to deny that it is of the highest importance to know what has preceded any given effect, and also to know as much about the cause as possible. But to view these anterior efficient causes as true explanations of any subsequent effect is to lose sight of precisely what is most striking in these events, the fact that they are *effects*, while the others are causes. This sort of a universe as reconstructed by mathematical science, when compared with the world of common sense, "is so abstract as to be quite spectral and merits the appellation (so

often quoted from Mr. Bradley) of 'an unearthly ballet of bloodless categories.'" [1]

Finally, Mechanism, by banishing purpose, end, and value from the universe, misrepresents actuality to just that extent. That purpose exists and controls to a certain extent our actions; that we achieve results under the impulse of desired ends; that our actions have a value over and above that which may result from their mere performance, seems to be incontestable. To one who would deny outright this plain and obvious truth, there is nothing to be said. No argument which we could advance would have any effect in changing his preconceived ideas. Yet there is a great deal to be said for teleology, both negatively and positively. On the negative side, one may rightly conclude that since Mechanism is inadequate, the presumption in favor of teleology attains the proportions of a very probable theory. Mechanists are constantly telling us that they can explain life in physico-chemical terms, but when we ask what particular physico-chemical function is similar to life, no reply is forthcoming.

Again, the living body which is so constantly referred to as a "living machine" presents many evidences of being so entirely different from every other kind of machine known to science that to confuse the two is but to pervert the true meaning of the word machine. A machine attains ends for the reason that it has been fashioned by an agent capable of perceiving and desiring ends. Its purposes are external to it, while the purposes of man, and of animals, are internal. Moreover, a machine which for one reason or another ceases to work, must be repaired by some one outside itself, but the living machine repairs itself, and while undergoing the process of rebuilding, does not cease altogether to function. We can only compare, even the most

[1] James, *Some Problems of Philosophy*, p. 207.

highly organized machine, with the living body on the supposition that we shall ignore what is most fundamental in the living machine, its immanent purposiveness.

From the positive side, the rôle which purpose has played in the history of mankind points to the important place which teleology must occupy if our explanations of the universe are to be really philosophical, that is to say, total views. Nature is not blind, except in a metaphorical sense. Man, at least, consciously, and often freely, seeks definite purposes. All the natural processes of evolution are not outside our control. The mind of man, too, has created novelty after novelty. Our culture, our institutions, art, science, and religion are the results of teleological activity, not of the mechanical workings of atoms in motion. We may wilfully close our eyes to the whole panorama of human achievement, but we can do so only under pain of surrendering all hope of ever being able to understand and appreciate what life is.[1]

Vitalism.—The cardinal principle of *Vitalism* is that there exist in the universe processes which are vital, that is to say, not of the mechanical kind, and whose nature and functionings are intimately bound up with the attainment of purposes, or of ends. These processes are mainly biological and psychological. The vitalist, however, would not acknowledge that, even outside the sphere of biological function, Mechanism is an acceptable theory. He feels that it takes no adequate account of many facts in the physical realm, which are as important as those revealed, for example, by an exclusively behavioristic analysis of bodily

[1] Royce, *Spirit of Modern Philosophy*, pp. 287–291: "If there is anything true in a philosophy of evolution, then there is something more than mere physical causation, mere mechanism in the world; for how there can be history in the world, no causal explanation, no appeal to mechanism as such, can ever directly express. In so far as you find mechanism only in the world, you find neither growth nor decay; you find no story at all." Op. cit., p. 290.

function. In casting about for a theory explanatory of reality, Mechanism strikes him as decidedly weak from whatever point of view it is defended. Mechanically, it is insufficient for it assumes too much; biologically, it involves out-and-out contradictions; philosophically, its status is that of a false theory, pure and simple.

The vitalist is a spiritualist and a dualist, but not in the sense that by a living thing he means something which defies the laws of physics and chemistry, and is governed by a spirit or a demon which acts by mere caprice and whose actions are not only unpredictable but unexplainable as well.

On the positive side, he stands for the concepts of purpose, end, and value whose presence in the functioning of every organism cry out as insistently for an explanation as do the merely external manifestations of activity. And the vitalist has every presumption of fact in his favor. Certainly the scientist, no less than the plain man, acts *as if* purposes were real. They may not be, but this is something which the mechanist must prove, not assume, as very often he is wont to do. For the burden of disproof falls on the mechanist in this case, and not on the vitalist, despite the contrary practice current amongst mechanists.

Vitalism has had a long history in philosophy, paralleling in fact that of Mechanism. It also has been received in many different meanings. To-day it presents both an idealistic and a dualistic side. The central doctrine of Vitalism, however, does not stand or fall with either hypothesis. While we defend the dualistic theory, we do not intend thereby to deny that *Neo-Vitalism*, as it is called, has contributed greatly to the establishment of the recognition in nature of a principle other than the mechanical. Driesch, the leading defender of Neo-Vitalism, has stated this accomplishment thus: "What is not a mere belief and not a matter of feeling is the existence of factual wholeness in

Nature, the existence of something that is certainly more than a mere sum. And to have proved this, and thus to have given a sound foundation to all further speculations about natural and metaphysical *wholeness*, is the merit of vitalism." [1]

On the other hand, Vitalism is not defended as an exclusive interpretation of the universe. Hoernlé expresses this concept of a union of Mechanism and Vitalism when he calls the theory he defends "Mechanism *and* Teleology." The vitalistic hypothesis does not call upon us to sacrifice anything which has been acquired through scientific research during the past century. Mathematical physics still remains, despite the fact that Mechanism as a theory is false. We may continue to deal with the qualities of matter in the terms of algebra, although we believe that these numbers do not adequately represent anything more than an aspect of the qualities studied. Mechanism has done a great service to science in that it has broadened the applicability of mathematical formulæ so as to include other than the purely quantitative aspects of physical objects.

Arguments in Favor of Vitalism.—The evidences which prove Vitalism are of many kinds. Some are strictly empirical, from the domain of physical science and of biology; others are of a philosophical character. Taken together they make up an argument whose cumulative force is absolutely convincing.

The first argument in favor of Vitalism is derived from experimental Embryology. Driesch [2] points out, and proves at great length, that the facts of active adaptation, particularly functional adaptation, and of regeneration cer-

[1] *Problems of Individuality*, p. 81.

[2] For the biological arguments, see Driesch, *Science and Philosophy of the Organism*, especially Vol. I.

tainly point to the operation of teleological factors in the life process. The phenomena attending the development of the embryo, prove that the embryo does not develop along the lines of a machine. No physical or chemical factor explains how, for example, from only a portion of the egg of a sea-urchin, not a partial but a complete embryo, though reduced in size, is developed. These, and other facts of embryology, cannot be accounted for on the mechanistic hypothesis, for they contradict the very idea of what a machine is.

Another proof is derived from the fact that the ovary, as an example of the origin of any complex system, develops from a single cell which experiences a multitude of divisions before the ovaries themselves are produced. To suppose that the original cell is a machine in this case would be to ask us to accept the impossible, as well as to believe that a machine can go on dividing and sub-dividing itself and yet produce that very complex machine, an ovary.

A third argument is based on a study of the physiology of movement. For example, man does not behave like a machine. There is a marked individuality in the actions of every man. Besides, he reacts to a stimulus, each man in his own individual way. A complete contrast of the behavior of an animal and of a machine shows beyond the peradventure of a doubt that the machine explanation is wholly inadequate when applied to an animal.

The universe is an orderly whole. In spite of the multitude of substances which compose it, in spite of their almost infinite number and infinitely different kinds of activities, there results from this complexity of things and functions, an order which is conducive to the welfare, not merely of the whole, but of the individual as well. Can this order be explained on the assumption that it does not exist at all, or if it does, that it is extrinsic to the things themselves?

Unless we assume an immanent finality present in all things, organic and inorganic, nature becomes an absurdity. Within things there is imbedded a purpose by virtue of which, in obedience to law always, each thing maintains its own individuality as well as acts upon things outside itself. This inherent purpose is, we admit, not easy to define if we fail to acknowledge the dualistic concept of substance and its accidents which form a composite, containing within itself the basis of all similarities, as well as the ground for all the differences which distinguish one body from another. But if substance and accident do form a substantial union, the finality of nature is understandable.[1]

A final argument arises from the consideration, borne in upon us by a multitude of facts, that living things are all *units*. This is especially evident in the case of man, where unity of consciousness assumes a significance which cannot be ignored without doing violence to the testimony of consciousness itself. Mechanism, with its conception of the living body as an aggregate of atoms bound together in a purely accidental way, cannot explain the persistence of these atoms in the compound and, at the same time, understand why we do not attribute our actions to the individual atoms but to the compound. If, however, we conceive the living body as animated by a vital principle we readily appreciate how transformations can occur at the same time preserving something which does not change.

[1] Many will object to the above argument because it involves hylomorphism as well as assumes the truth of the existence of God, design, etc. Rather it proves hylomorphism and lays a secure foundation for the argument from design. Contemporary philosophy is strangely adverse even to the mere mention of God. There are, however, many encouraging signs which point to a recognition by philosophers of the necessity of considering the Deity in every philosophic formulation which deserves the name of such. To construct a philosophy and to ignore God is but another instance of playing Hamlet without the Prince of Denmark.

In presenting the above arguments it was not considered necessary to add anything to the statements already advanced concerning teleology in nature. That ends, purposes, and values exist, appears to us incontestable. Such an acknowledgment leads us naturally and logically to an acceptance of Vitalism, understood of course in its widest sense. The increasing recognition given to this standpoint has been one of the chief results of recent philosophic speculation, as well as a sign of the movement of thinkers away from the unhealthy theorizings of the naturalistic school which so completely dominated the thought of the last century.

Criticism of Vitalism.—Besides the arguments urged in favor of Mechanism, the following objections, taken from Paulsen's *Introduction to Philosophy*, represent best the reasons which prompt many mechanists to reject the vitalist theory.[1]

The first objection may be formulated thus: "*Everything must occur and be explained physically; and everything must be considered and interpreted metaphysically.*" [2] From which we conclude that Mechanism is the only tenable theory so far as the activities of nature are concerned. Metaphysics has a place in knowledge, but it is only as an interpreter of the results achieved by mechanistic science that we may recognize it. On no other basis can we ever hope to end the age-long struggle between science and philosophy.

The argument is a manifest fallacy—a *petitio principii* pure and simple. If everything *must* occur and be explained

[1] It is impossible to translate the full force of these objections in the short compass we allow them. The student should therefore consult Paulsen's *Introduction to Philosophy*, pp. 158–206, if he fears that we have understated the arguments advanced against the teleological point of view.

[2] *Introduction to Philosophy*, p. 162.

physically, the very ground is cut from under our feet and we are obliged to accept Mechanism, *bon gré mal gré*. It is, moreover, an assumption, which cannot be substantiated, to assert that on no other theory than the mechanico-parallelism of Paulsen is it possible to reconcile the diverse, and apparently conflicting, results achieved by science and philosophy. McDougall points out that such scientists as Stokes, Lord Kelvin, Maxwell, Sir Oliver Lodge, J. A. Thomson and many others, have not felt compelled to explain the evolution and life processes of animals solely in mechanistic terms, nor have they seen in teleology a theory which is contrary to the proved results of physical science.[1]

The second objection is drawn from a consideration of the place which so-called "ends" are supposed to hold in nature. If ends exist, the necessary means to attain these ends must also exist. Paulsen then develops at great length a fearful picture of the cruelty of nature, pointing out by many examples how nature most prodigally wastes millions of possible beings in order to bring one to complete development. "A single female fish lays hundreds of thousands of eggs a year," writes Paulsen. He also cites the uselessness of certain organs, as the vermiform appendix, to show that nature creates without any idea of value and for no intelligible purpose. Life is merely a ruthless struggle for existence. Moreover, if life, even human life, had a value we should be able to discover it. But what vitalist has pointed out to us a complete scheme of the ends to be attained by even one species, to say nothing of all species, of nature as a whole? Paulsen goes to great pains to demonstrate that in the history of the human race, no less than in that of the individual man, a scientific formulation of values is impossible. "History looks like a series of divine inter-

[1] *Body and Mind*, p. 253.

positions," but is in fact but the record of those who have conquered their enemies and imposed upon us, as the best possible thing and as truth, the results of their victory.

The most obvious answer to the above objection is that if Paulsen is determined not to perceive ends or values in nature, nothing that we can say will help him to see them. To the unprejudiced thinker, however, we may reply—look at the world as a whole, sum up its cruelties, its evils moral and physical, balance these against the good which one has also encountered, and then conclude whether the idea of value is useless.

Moreover, Paulsen assumes that to prove the existence of "ends" in nature it is necessary beforehand to be able to chart every influence which will affect things as well as every goal which they must reach. What he therefore demands in man is the knowledge which God alone possesses. Vitalists have not been so exacting of their opponents. Because mechanists could not explain every natural occurrence in mechanical terms they did not cry out triumphantly that mechanism is false. Mechanists acknowledge in their own case the limitations of human knowledge. As a matter of philosophic courtesy, should they not concede to the vitalist the self-same advantage which they claim for themselves?

It is not a question of whether we know *all* the ends to be attained by nature, but whether any end, even one, exists and can be proved by us. If such be the case, a rigid mechanism falls to the ground by the sheer weight of its own stupendous assumptions. We may find a parallel to this objection in the one so often brought against the doctrine of free will, where it is argued that man is not free because in so many cases his acts are determined by motives or events over which he has had no control. But to prove the freedom of the human will, it is not necessary to demon-

strate that man is free in all and every one of his actions. If he be free in *any* of his actions, freedom of the will must be acknowledged.

In conclusion, we may say that the examples of ruthlessness in nature collected by Paulsen prove nothing. No one denies the struggle for existence, nor that nature, and sometimes man, is cruel. Whether certain organs are useless or not, is a problem for biology to determine. Any one acquainted with the progress of biological science appreciates full well that in this matter no man knows what judgment the next day will bring. The dysteleology of one day is the teleology of the next.

But what is generally considered the most serious objection to Vitalism is that which arises from the triumph of the theory of evolution. As Paulsen argues, "The former theory, which assumed that animal and plant species owe their origin to an intelligence acting from without, is thereby finally overthrown as a natural historical theory—overthrown, not by being refuted, but, like every worn-out hypothesis, removed by the entrance of its legitimate successor, the better theory." [1]

To answer this objection adequately would require a detailed examination of the theory of evolution, both in its scientific and philosophical aspects, as well as of the conclusions which, we think, Paulsen illogically draws from this acceptance. Briefly, however, we may call attention to the following facts. From the point of view of science, evolution is neither proved nor unproved. We may accept it as the most plausible theory yet advanced to explain certain facts, without, at the same time admitting that we must throw overboard all conceptions which involve purpose and value in nature. Mechanical evolution which supposes that everything has evolved from a primeval undifferentiated mass to

[1] *Introduction to Philosophy*, p. 181.

the state which it now presents not only is not proved, but is manifestly incapable of proof. We can only assume it by smuggling into the mechanical theory a kind of teleology which has no place therein.[1] As for biological evolution, not even Darwin denied that teleological factors influenced development.

Perhaps a sufficient reply to the objection from evolution might be formulated by setting out the limitations which Howison concludes must be acknowledged as a presupposition to every philosophical use of the evolutionary hypothesis.[2] These conclusions may be summarized under the following headings: (1) Evolution cannot cross the chasm which separates the phenomenal from the noumenal; (2) It cannot pass from the inorganic to the organic; (3) There is a further break between the purely physiological and the psychological or mental; (4) Another fact which it cannot explain is the gulf which separates the unknowable and the explanatory; (5) Finally, the passage from non-rational nature to rational nature, that is, to the mind of man, is impossible in the theory of evolution.[3]

From our examination of the contending theories of Mechanism and Vitalism we conclude that a mechanistic metaphysics is incapable of explaining many of the facts of nature, and that, in particular, the facts of mind rebel against the limitations within which a rigid mechanism endeavors to compress them. Mechanism has its place, as a regulative and heuristic principle. But as a philosophy it

[1] Read Ward, *Naturalism and Agnosticism*, Vol. I, pp. 185–271.

[2] *Limits of Evolution*, pp. 1–50; also Montague, in *Journal of Philosophy*, Vol. VI, 1909.

[3] Muckermann, Article "Evolution," in *Catholic Encyclopedia*, Vol.V, pp. 654–670, especially his general conclusions; also Windle, *What is Life?*, *The Church and Science;* Gerard, *The Oldest Riddle and the Newest Answer;* Wasmann, *Modern Biology and the Theory of Evolution*, *The Problem of Evolution;* Gemelli, *L'Enigma della Vita e I Nuovi Orizzonti della Biologia;* Morgan, *A Critique of the Theory of Evolution;* Johnstone, *The Philosophy of Biology;* Schiller, *Riddles of the Sphinx.*

is totally inadequate. True evolution, the historical point of view, a conception of nature which is dynamic, escape the mechanistic philosophy. All that it sees is the framework, and that but partially. To understand the whole of nature, the framework built up into a living pulsating cosmos, we must view it teleologically, that is, from the standpoint of immanent purposiveness. The significance of teleology for the future lies precisely in this, that it demands the totality of vision through which alone the whole truth may be discovered.

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CHAPTER VI

THE PROBLEM OF KNOWLEDGE

In our investigations of the problems of philosophy, we have confined our attention so far to, what might be called, the external aspects of reality. Reality also presents an inner side which, on reflection, bristles with problems as numerous and as truly fundamental as those which we have attempted to solve. We have thought about the world as one or many, as material or spiritual, as mechanical or teleological, but we have assumed always that there is a world external to our minds. It is necessary, now, to examine critically this assumption, and to ask ourselves whether we are justified in supposing that a world really distinct from ourselves exists.

To the man in the street, the question as to the extra-mental reality of the world is received with questioning surprise. For him it approaches the absurd to doubt about the reality of the universe, since he has always believed that he is surrounded by material things, and feels that he can directly perceive them. But is this belief well grounded? A thorough examination of the act of knowing, together with the factors which influence it, causes doubts as to the validity of our knowledge.

If we know the world at all, we must know it with and by our minds. Now, all knowledge begins with perception, but perception carries with it no definite guaranties of its own accuracy. Our senses deceive us often. Not only do we see things which do not exist, as in illusions, dreams, etc.,

but we fail often to perceive many things which actually exist. Again, our perceptions are transformed radically by the action of one sense upon the other, to say nothing of the transmutations which take place as sensations affect our thoughts. How can we put confidence in our thoughts when we know that we have inferred the existence of the things they are supposed to represent from data given to us in sense experience? Granting that we can perceive a blue flower, who has ever seen "blueness"? What right have we to pass from the data of sensation to the highly organized statements of which thought is capable? The problem we must face, therefore, is this—What is the value of our thoughts? Will they, upon critical analysis, be found to be truly representative of reality outside the mind? Or must we say that ideas reflect only what is taking place in our minds, and have no representative value as far as outside things go? The world, if it exists, is certainly outside our minds; thoughts are within the mind. How can these two ever be brought together?

But other problems, no less serious, follow quickly upon any solution we may give to the above questions. What is the relation of these thoughts of ours to reality? Are they a part of it, or do they merely represent reality? The mental may be everything, while what we call reality is only a shadow or an appearance. If this be so, what is truth, and what is error? Is error possible, supposing that nothing exists outside the mind? At the bottom of these questions lies the problem of what is the metaphysical nature of reality.

Yet further problems await us. What do we mean when we say that we know a thing? In other words, what is knowledge? Knowledge implies three things, a knower, a thing known, and the act of knowing. Now, we must examine thoroughly all three of these necessary factors in

knowledge, if we would determine how much of truth is due to one and how much to another. The knowledge act implies a subject and an object. But what do the terms, subjective and objective, connote? To speak of subject and object is to imply a duality; it is to say that the thinking subject must be distinguished from the object thought. We speak about arriving at truth, but what justification have we for asserting that truth is possible? This last question involves the validity of knowledge, and carries along with it the problem of the criteria which determine our acceptance of the deliverances of mind. Few thinkers deny that we can know the truth. They are not agreed, however, on what it is precisely which induces us to accept one statement rather than another. Science has its own way of investigating truth; religion follows another path, entirely different. Shall we say that the only truth is that which is acquired experimentally? Religious knowledge would then not be knowledge at all, but mere opinion.

Epistemology.—It is evident, therefore, that the mere statement of the problem of knowledge gives rise to numerous questions which call for investigation, if we are to accept the beliefs of the plain man about truth and reality. An examination of these problems is the function of that branch of philosophy which we call *Epistemology*. Epistemology is the theory or science of knowledge. As the end of all knowledge is certitude, it may also be called appropriately the study of certitude.

Now, this study of certitude entails three principal problems, to each one of which we must give a reply if we hope to attain a well-rounded, adequate theory of knowledge. In the first place, our inquiry centers about the psychological factors which are involved in the process of knowledge. We must know what cognition is; in other words, we must

examine the functions of perception, of conception, and the relations of one to the other. Secondly, our ideas have a relation to reality. What are these ideas, what is reality? This is the problem of the metaphysical conditions which surround knowledge. Finally, we are to inquire into the nature and value of truth and the tests which must be applied to different statements in order to compel assent, which last question is, in the strict sense of the word, the epistemological problem.

The inquiry, therefore, divides itself naturally into three parts. But, since we have already in Chapter II outlined the different replies given to the problem of reality, it will not be necessary to speak at any great length of the metaphysical conditions of knowledge. The different ways of interpreting reality are three: Absolutism, Pluralism, and Realism, to which, logically enough correspond three theories of knowledge, Idealism, Pragmatism, and Realism. It is our purpose to examine these three theories, both from a psychological and an epistemological point of view with the idea of determining which one is best suited to meet the demands of both experience and reflective thought.

While the word Epistemology is recent, the problem itself is as old as philosophy. Ever since men began to speculate they have been worried about how we can know things, and whether or not our knowledge is certain. To review the history of this, one of the most remarkable of philosophical controversies, would add little or nothing to the information necessary to solve the problem as it is presented to-day. Let us, therefore, confine our attention to the modern, and especially to the contemporary solutions which have been offered, never forgetting that these theories have their roots deep down in the past, and that, when stripped of their modern dress, they present to us the very same answers which were given to problems which are hoary with age.

The Greeks had their idealists, realists, and even pragmatists. Conceptualism, Nominalism, and Realism are the mediæval counterparts of very modern theories. The historian of philosophy is fully aware that the old questions recur again and again with startling frequency. And the new replies are not quite so new as many of their supporters would like the world to believe.

Idealism.—The first reply given to the problem of knowledge by contemporary thinkers is called *Idealism.*[1] Its commanding position in modern thought is due mainly to the efforts of Kant, who formulated the fundamental principles upon which the theory is based. Kant, however, owes a great deal to his immediate predecessors, especially to Berkeley, whose arguments in behalf of Idealism still remain the classic proofs for the theory. The Kantian philosophy differs from that of Berkeley in this, that its chief characteristic is what may be called its "critical" form. Kant believed that although reality may exist outside the mind, it was mental as far as we are concerned. The categories which he formulated as the necessary conditions of knowledge did not entail a corresponding ideal existence of things; they did, however, necessitate that in as far as we can know things, they must be mental.[2]

[1] For a history of Idealism, see Willman, *Geschichte des Idealismus;* Külpe, *The Philosophy of the Present in Germany,* trans. Patrick, pp. 134–235; Turner, *History of Philosophy,* pp. 528–553; Stöckl, *Handbook of the History of Philosophy;* Weber, *History of Philosophy.*

[2] Perry, *Present Philosophical Tendencies,* p. 143: "Kant, although he was the founder of a new idealism, was not himself an idealist, *in the metaphysical sense.* He defined the categories as conditions imposed on things by the knowing of them; but he asserted that reality was under no necessity of conforming to these conditions, *except in so far as known.* That a thing must be known in order to be, he expressly denied. But the promptness and apparent ease with which Kant's view was transformed into a metaphysical idealism, is proof of the instability of the situation as he left it. Having established the essentially formative and constitutive character of knowledge, nothing can be independent of knowledge except that which lies beyond even the possibility of knowledge. The forms of the cognitive consciousness

Kant's Idealism is, therefore, logical. In his successors it developed both a logical and a metaphysical strain, represented by the intellectualistic idealism of Hegel, and a voluntaristic or ethical strain, called the voluntaristic idealism of Fichte. Neo-Kantians have endeavored to preserve the critical side of the Kantian philosophy as against the metaphysical introductions into Idealism by Hegel and Fichte. The followers of the latter, Neo-Hegelians and Neo-Fichteans, have emphasized the commanding position in knowledge of intellect or will, according to the leanings of each individual thinker.

Kantianism is based on two far-reaching principles which have played a directive rôle in every form of critical Idealism since his day. One is the principle of unity in difference; the other, the reconciliation of antitheses in a higher synthesis. Dissatisfied with the arguments generally advanced against the sceptics by spiritualist thinkers, Kant contended that the starting point of the defenders of religion and of the spiritual in nature had been wrong. Instead of assuming certain axioms and principles of thought to be true, it is necessary first of all to examine them critically in order to discover what is necessary for knowledge, and to distinguish it from what is not necessary. Mathematics and physics had followed this method of inquiry, and the startling results obtained fired Kant with the desire to revolutionize metaphysical knowledge by applying to it the critical method which had been so fruitful an ally of science. He, therefore, concluded that on a parity with our understanding of nature, in which we force individual data to conform to definite general laws formulated by the mind, so in the world of ideas, the object known must conform to certain

underlie all that is or can be experienced. So that Kant's 'thing-in-itself,' like the material substratum which Berkeley had so effectually disposed of, is no more than a symbol of nescience."

a priori forms or categories of the mind in order to be intelligible. It was Hegel who carried this idea to its logical conclusion, contending that ideas are purely relative, and have no representative value outside the mind. Things can be known only as a whole, for the whole alone exists. To know completely and adequately, we must know the whole.

From which it follows that there is no such thing as stable truth. Truth, as we know it, is no better than an approximation. What then becomes of our approximations, half-truths, errors, illusions? They must remain to plague us till they can be absorbed in the Unity which reconciles all differences, antitheses, and antinomies. The Unity of ground amidst structural differences is a philosophic conception of post-Kantian thinkers, but it is implicit in the writings of Kant. Thus, the categories of Kant, which as he framed them were merely to represent the phenomenal world as it appeared to the mind, have been transferred by his disciples to external reality itself, doing away altogether with the so-called "thing-in-itself," and making the unity of thought, the unity and ground of reality as well. From a logical and critical theory, Kantianism thus passed through epistemology to an out-and-out metaphysics.

Arising as a result of the application of a priori critical principles to the field of knowledge, Kantists concluded to the essential relativity and immanence of all knowledge. It was but one step further, through the doctrine of unity amongst differences, to the belief that the ground of knowledge and the ground of reality were one and the same thing. As Walker remarks, "Thus Absolutism is Criticism self-realized. Finding that thought and being are one, from a Theory of Knowledge Criticism has grown into a Theory of Reality. The categories are no longer regarded as constitutive of a phenomenal, but of a real world; and that last condition of all knowledge—the Transcendental Unity of

Apperception—is hypostatised, becoming the real Subject of an universal consciousness, an Absolute which is the Ground of all things, and yet is nothing in abstraction from that of which it is the Ground." [1]

The Psychological Basis of a Knowledge Theory.—Approaching the problem of knowledge from its psychological side, and this is precisely what Kant did, he distinguished two questions—one having to do with the recognition and analysis of the mental forms which exist in the mind, and the second, or transcendental problem, concerning itself with the value of these mental categories. The critical attitude is, therefore, founded upon and, to a great extent, dependent on the kind of psychology it professes. So true is this that the pragmatists constantly complain of the narrow and false psychologism which characterizes all idealistic constructions.

Now, the problem of knowledge, like every other problem, presents certain facts, which every one, no matter what his explanation of these facts may be, must accept as the starting point for further argument. Without these presuppositions, postulates, data, or generally accepted principles, it is evidently impossible to progress in any inquiry beyond the stage of merely stating what the problem to be considered is. As far as a theory of knowledge is concerned, the point of departure must be the experience of the individual epistemologist. This experience is obviously complex, but it is the only experience which we can call our own, and which, therefore, we can ever hope to understand.[2]

[1] *Theories of Knowledge*, p. 11.

[2] The pragmatist insists that we make a beginning with the "data of pure experience." Passing over the fact that psychology knows no "pure experience," how are we to analyze what is without question so foreign to our everyday habits, that it is next to impossible to conceive any mental state where the subject-object distinction is not implied?

Beginning thus with my own experience, I can distinguish two fundamentally different kinds of acts—one is called perception, the other, intellection. Perception is the first source of all my knowledge, and it appears to me to bear a direct relation with reality. What I see, and hear, and touch are not my sensations, but objects external to myself. Further investigations may possibly demonstrate that I have not read correctly the deliverances of my senses; that what I perceived were not things but my own sensations; that the color, shape, size which I thought to be in things was not really in them at all but in me. My consciousness, however, does not tell me this. It says simply that I saw, heard, and touched objects. Neither do I find in the act of perception any note of personal responsibility for the qualities of the things perceived nor of purpose which so modified these things that I should perceive them as I did. Of course, there may exist cases where I am directly responsible for things being what they are. Likewise, ends and purposes often compel me to consider one object rather than another. Perception, however, viewed simply as an experience of my mind, carries along with it no direct and essential note of individual responsibility or of purpose.

Moreover, although no one can deny that both universal ideas and inferences are involved in practically all of my perceptions, as, for example, when I say, "Yesterday I *saw* my friend, Smith the psychologist, having a heated argument with an eminent philosopher on the steps of McMahon Hall"; yet this fact is the result of an analysis of the perception in question, and is not in any way "given" in the perception itself.[1]

[1] "Both universal ideas and inferences are involved in perception, as even the plain man may be forced to admit. Strictly, however, and as applied to perception in general, this is not a datum of perceptual experience, but belongs to theory. Ordinarily, what we perceive, whether it be natural objects, or their qualities, colours, shapes and distances, we perceive immediately. Our subsumption is not

Again, while it must be admitted that there exist cases in which we do perceive our own sensations, these are not numerous, and are of so indefinite and vague a character, that they cannot be compared with the clear, vivid, and distinct perceptions which form the basis of our ordinary experiences. In these latter, any reference to the sense process is absolutely wanting. What we mean to assert is, that in the act of perception we perceive objects, not sensations. That these objects may, after examination, be reduced to sensations is quite another thing. Such a conclusion is certainly not given to us in our ordinary perceptual experiences.

Sensations integrate to form what are called "sensation-complexes." The percept which results is, neither the sum of the individual sensations analyzed out of the complex, nor is it equivalent to the complex. The percept, which has meaning and a relation to things other than the perceiver, is something altogether different from the sensations which have been compounded, as it were, to make up the percept. What happens in every percept is that we subsume individual experiences under general headings, that is, under universal ideas. Moreover, it is very important to distinguish between ideas as thoughts, and ideas as instruments by means of which we think of objects other than ourselves. While ideas exist in the mind, certainly it is not of ideas we think, but of the things existing outside the mind which they represent to us, except in the case where

deliberate. Our universal ideas function unconsciously. The assertion that *all* perception involves subsumption under universal ideas and is really inferential in character is itself an inference based on particular cases in which perception halts and stumbles. That universal ideas exist, and function in sense-perception can readily be verified in experience; but whether or not *all* perception is inferential is quite another matter. Indeed, if it were, it would be difficult to conceive how perception could begin." (Walker, *Theories of Knowledge*, p. 46.)

I have summarized in the above paragraphs the analysis by Walker of the data of sense experience.

the mind expressly constructs ideas without any reference to reality, as, for example, in imagination.

The mind, therefore, delivers to us, as a fundamental datum, a belief in the existence of mind-independent realities. This belief may turn out to be false, but no one can deny that we have it. Neither is it required to perceive a thing by means of the senses to know that it exists. Many real objects cannot be so perceived, yet we are certain of their existence; for example, the movement for World Peace, or Bolshevism. It is one of the characteristics of an idea that it functions perfectly well in ordinary use without being analyzed. As a matter of fact, few of our ideas are ever analyzed as to their content, nevertheless they possess a very definite meaning for us.

Ideas, too, affect our actions, impelling us to try to realize something which exists as yet only in the mind. However, purpose does not control ideas to the extent that it does away with the objective reference of thought. The content of our thought remains the same, no matter what our purposes may be. Purpose impels us to a certain course of thought, but it has no control over the results of our thoughts. These results are determined partly by cerebral action and partly by mental habit, with habit playing the most important rôle.

Consciousness "gives" us this much. It points to a logical nexus amongst our thoughts. But how does this nexus arise? The only satisfactory reply to this question is that sense experience, with its direct reference to extra-mental reality, lays the foundation for the orderly sequence which governs our thoughts. "The succession of our thoughts is due partly to physiological and partly to intellectual habits, both of which presuppose and have been built up by objective experience, the strength of these habits depending, other conditions being the same, upon the intensity and the

frequency of repetition of those experiences or of our reflections upon them. Purposes which in constructive thought consist in a general grasp of the problem in hand have little to do with the succession of ideas as such, though they control it throughout. By them the relevancy of associated ideas is determined, but not the particular order in which they arise." [1]

To return to the Kantian theory of knowledge. Kant began with the assumption that we cannot know reality as it is, or better, that the mind does not conform to the object thought, but that vice versa, the object conforms to the mind, which possesses certain a priori forms without which it is impossible to think. This is called the postulate of Apriorism. Knowledge, therefore, has a twofold source; it comes partly from experience, is a posteriori, and partly from the constitution of the mind, is a priori. Sensations are the raw material out of which knowledge is constructed.

Empirical knowledge, however, gives us no certainty as to what things really are, since it is dependent on certain mental forms, namely, those of time and space. All we can know is the appearance, not the reality of things. The "thing-in itself" is unknowable.

Our judgments are of two kinds, synthetic a posteriori and synthetic a priori. The synthetic a posteriori judgments are those which begin with experience and are grounded in experience, as, for example, the truths of physics and chemistry. These are truths, and universally true, but their universality is of an experimental character. It is in no sense of the word absolute or pure. Only synthetic a priori judgments are truly universal, that is, independent of all experience, for they rely solely on certain mental forms for their universality, and as such are independent of experience. These forms are "transcendental," that is

[1] Walker, *Theories of Knowledge*, p. 69.

to say, prior to all experience, and a necessary condition for the understanding of experience.

Thus, Kant's peculiar contribution to the problem of knowledge consists in the "categories," under which all experiences must be subsumed, and without which knowledge is impossible.[1]

The arguments advanced by Kant revolve about his attempt to discredit the Humian scepticism, the central doctrine of which is that the mind as a substance does not exist. Mind is simply a mass of perceptions, having relations to one another, but in no sense constituting an underlying unit. There are, therefore, no such things as necessary and universal judgments.

Kant agreed with Hume that the terms of experience are essentially phenomenal, and conceived of the physical order underlying these phenomena, as also mental. Phenomena, both physical and mental, therefore, come together in a unity of apperception. Our experience is contingent and particular, from which it would be impossible to derive a necessary and universal judgment unless the mind contained some form or other capable of synthesizing individual experiences. That the mind, even conceived as sense experience, possesses such a native function is proved by the fact that we cannot think anything, nor can we represent to ourselves any sensible object without localizing it and assuming that it exists at some definite moment. The categories of time and space are universal and, therefore, cannot arise from any particular experience. They are a priori.

Kantianism, in the second place, is based on the assump-

[1] For a fuller exposition and criticism of the Kantian doctrine of Categories, consult Coffey, *Epistemology*, Vol. I, pp. 168–197; Vol. II, pp. 184–202; Turner, *History of Philosophy*, pp. 530 et seq.; Sentroul, *Kant;* Mercier, *Criteriologie Générale*, pp. 207–223; Ward, James, *A Study of Kant;* O'Sullivan, *Old Criticism and New Pragmatism;* Prichard, *Kant's Theory of Knowledge;* Paulsen, *Introduction to Philosophy*, pp. 398–470; Ladd, *Philosophy of Knowledge.*

tion that knowledge is prior to existence, which latter depends upon the a priori conditions of knowledge both for its understanding and possibility. Experience is true only in as far as it fulfills the conditions of unity which lie at the basis of every thought process. The ground of all being is knowledge, not of the individual knower, but of the synthetic activity which is of the essence of thought itself. Mind is essentially an organizing principle. In this way, Idealism hoped to do away with the subjective note which had been so essential a mark of the earlier Idealisms, and to attain thereby an objective character. Thus, metaphysical knowledge has its conditions no less than scientific knowledge, and is preserved by the same token. As a matter of fact, upon critical examination, all the principles of science and of mathematics are found to be nothing but synthetic a priori judgments.

Criticism of Kant's Idealism.—An argument often adduced in favor of Kantianism is that it is the only possible theory which can save us from, on the one side, the errors of extreme subjectivism, and on the other, the scepticism of Hume. By justifying the universality and necessity of our judgments in terms, both of experience and of mind, it creates a *via media* which offers a safe road past the extremes of subjectivists and of sceptics. To this, however, we reply that there is another possible theory explanatory of the validity of our judgments, that of Realism, and before accepting Kantianism it would be well to examine the postulates upon which it is built, in order to discover if they are sound enough to carry this theory. Fairness, too, demands that both Pragmatism and Realism be given an opportunity of presenting their cases.

The fundamental principle of Apriorism is that the synthetic activity of the mind presupposes the existence of

categories which precede and are a condition of every experience. Despite the ambiguity to which this proposition obviously leaves itself open, certainly it meant, in the philosophy of Kant, a metaphysical, as distinct from a logical or psychological, condition. Knowledge is, therefore, conditioned by an extra-mental reality which makes all knowledge purely subjective or, if this be not so, then Kantianism fails altogether to explain the real ground of our knowledge. For the mind of man is certainly no less contingent than his experience, and a priori forms do not explain why knowledge must be universally valid. They only explain why knowledge is valid for *each individual*, and for other individuals with minds constituted like his. If, on the other hand, it is not the individual mind which attains truth, but mind in general, a transcendental being, then truth is forever unknowable by us because, by supposition, the ground itself is unknowable.[1]

Perry points out that Kant falls into the self-same difficulties which beset the theory of Berkeley because he assumes that, since we know a thing, everything is knowledge, or to put it negatively, nothing can exist which is not an idea.[2] Moreover, it is impossible to mention a thing which is not an idea, from which he deduces, though wrongly, that everything is idea.

Kant's doctrine of sense perception stands or falls with the truth or falsehood of his descriptions of space and time as a priori forms. As a matter of fact, there seems to be a great deal of confusion in the Kantian idea of space as a

[1] Coffey, *Theory of Knowledge*, Vol. I, pp. 201–231.

[2] Perry, *Present Philosophical Tendencies*, pp. 125 et seq. Read Perry for an excellent statement of what he calls the error of "definition by initial predication" and the "ego-centric predicament." The first argument is false because it describes a thing by a characterization which is not fundamental at all Because we know things, it need not follow that for things to exist they must be ideas. Similarly, the ego-centric predicament proves nothing. It is merely a difficulty of method. That everything mentioned is an idea is obviously true. But it is a far cry from this fact to the statement that everything which exists is *only* an idea. Also Külpe, *Introduction to Philosophy*, p. 197.

priori. The root of his erroneous interpretation appears to be that he failed to distinguish sufficiently between the three different kinds of space—real, ideal, and imaginary space. Our idea of real space is an abstraction from data derived from experience, because when I behold two bodies occupying two distinct positions, I immediately infer a relation of distance between them—this is real space. Ideal space is simply an extension of this idea, obtained empirically, to cover an infinite number of possible bodies; while imaginary space is capable of increase or decrease as I wish. Kant confuses, therefore, real with ideal space. In fact, his whole treatment of the space concept contains manifest incoherencies. Because my idea of space results from a mental abstraction is no proof that the idea is not objectively determined. The same observation holds true of time. Our ideas of space and time can be thought of only as a priori forms, if we are careful to exclude *real* space and *real* time, which are abstractions and are necessarily contingent and limited. [1]

It is no solution of the many difficulties involved in our perceptions to contend that their truth depends on the truth of certain a priori forms which the mind possesses, and to which they must conform in order to be valid. Such an answer only pushes back the original problem to an examination of the conformity which is said to exist between the mental forms and the act of perceiving. Assuming the existence of space-time categories, the problem of the reality of an extra-mental world still remains, and all the arguments brought against the objectivity of our sense perceptions by the sceptics are valid when directed against the Kantian formulation.

[1] For a full treatment of our notions of space and time, consult Nys, *Le Notion de Temps*, pp. 66 et seq.; Nys, *Le Notion d'Espace*, pp. 292–432.

For a detailed critique of the Kantian theory of Sense Perception, Coffey, *Epistemology*, Vol. II, pp. 184–207; Prichard, *Kant's Theory of Knowledge*.

Again, it is objected against Apriorism that the mental forms which it postulates are purely static. Nor does the Hegelian idea of the Absolute unfolding itself bestow upon these forms a developmental character satisfactory to those who press the claims of a psychology which demands, if it is to be in any way an adequate picture of the human mind, a gradual growth in knowledge. Knowledge is not, as Kantians assert, a mere progress towards a better understanding of the structure of the mind. Such development may well be logical, but it is not *real* in any true sense of the word. Ideas, no less than men, present to the observer a story, and it is one of the chief merits of genetic psychology to have pointed out this growth of ideas. But do the a priori forms of Kant likewise grow? we may well ask. If they do, and judging from experience no one can safely deny the fact, what becomes of the universality and necessity which these forms are supposed to bestow upon our perceptions of phenomena? To which question might well be added the other, no less embarrassing one, which Walker asks, "How is it that, if all men use the same *a priori* 'schema' and 'framework,' no one is conscious of it, and no two philosophers have ever agreed as to its structural form? How comes it that no one yet has constructed a self-consistent 'natural' system if ready-made within him every one has its plan?" [1]

Neither is it required of us to assume the existence of a priori forms in order to explain the elements of necessity and universality in our judgments. Although it is undoubtedly true that judgments are expressed, as a general rule, in the subject-predicate form, yet it is not necessary to think in such a way. We can think without expressly thinking a subject-predicate. Moreover, we can account for this prac-

[1] Walker, *Theories of Knowledge*, p. 244.

tice of formulating our judgments in this way on an empirical basis since objects come to us piece by piece, and what we predicate concerning objects is not spontaneously revealed to us, but is the result of observation and of study. If the mind could take in everything as a whole and at one glance, it would then be true that we should not have to turn successively from one aspect of a thing to another aspect in order to understand it. As a matter of fact, the mind proceeds step by step in its predications, and this accounts sufficiently well for the characteristics, even of universality and necessity, which we bestow mentally upon things. There seems then to exist no need of calling in a priori categories to permeate all our judgments and perceptions thereby rendering them objectively valid. And what has been said of the subject-predicate form of our judgments, as well as of our notions of space and time, may be repeated of our predications in quantity and quality. The origin of these latter characteristics may also be explained a posteriori, assuming that the mind possesses the power of abstraction.

The cardinal error of every form of Apriorism seems to be its assumption of the identity of thought and reality. Beginning with this principle, it pretends to deduce all reality from a few fundamental a priori forms. Such a task is hopeless, and the majority of modern thinkers see no solution of the epistemological problem by starting from the transcendental standpoint. Instead of proceeding from mental categories and then passing downward to reality, the tendency to-day is to start with experience and move upwards. While one may not agree with the pragmatist idea of divorcing metaphysics from epistemology, realizing that the two have a necessary relation to each other, yet one may be thankful for the pragmatic assaults on the fanciful character of much of the specula-

tion which has characterized a priori philosophy. If we are ever to solve the problem of knowledge, we must start from the data of human consciousness. These data should be criticised, and quite thoroughly, but it is one thing to criticise the data of human experience, it is another to do away with them altogether. [1]

The Theory of Knowledge of Absolutism.—Kant did not go the way of logic and pass from his principles of Apriorism and Immanence to an out-and-out Absolutism. These principles, he maintained, held good only for the phenomenal world. It remained for his successors, Fichte, Schelling, and especially Hegel, to do away with all reality except that which, in some way or other, is directly connected with the Absolute One. Kant believed in the "thing-in-itself"; his starting point was human knowledge, no matter how wrongly he interpreted it. But later Idealists would have none of the dualism inherent in the system of Kant. They did away with his illogicalities and half measures, and boldly plunged into the all-embracing waters of the Absolute—the ground, the reason, the beginning, and end of all things.

The starting point of the Hegelian [2] philosophy is the concept of the Absolute. Viewing this Absolute logically, not ethically, as had Kant and Fichte, nor from a romantic standpoint as had Schelling, Hegel contended that only the Absolute or rational is real. The fundamental principle of his thought is that "all being is thought realized, and all becoming is a development of thought." The Absolute

[1] Walker, *Theories of Knowledge*, pp. 238–256, for a critique of Apriorism.

[2] Caird, *Hegel;* Royce, *The Spirit of Modern Philosophy, The World and the Individual;* Croce, *What is Living and What is Dead in Hegel's Philosophy?;* O'Sullivan, *Old Criticism and New Pragmatism;* Turner, *History of Philosophy;* Weber, *History of Philosophy;* Windelband, *History of Philosophy;* Bosanquet, *The Meeting of Extremes in Contemporary Philosophy;* Külpe, *Philosophy of the Present in Germany.*

is dynamic, always in the process of evolving Itself. As Idea, it is the ground of all reality; it is, in its process of development, the beginning of change and the end which reconciles all differences in Itself.

The Criticism of Hegel, is, therefore, much more than a method; in his hands it has become a philosophy, a theory of reality. All Absolutisms are of an essentially similar character, for while one thinker may interpret the Final Ground as thought, another as will, a third as sentiency, all are agreed that the Absolute, which is some form or other of consciousness, alone is real; it alone possesses truth and validity. Later absolutists, like Green, conceive of reality as an order of relations which demands the existence of a mind to make them intelligible,[1] while others, for example, Bradley,[2] identify consciousness with sentient experience. But sentiency is, for these thinkers, at bottom one and the same thing as thought. However, in spite of the manifold inconsistencies and contradictions which arise from the appearances of things, reality is one. The character of this one is essentially positive, not negative. Although everything that we know or can know is merely appearance, this appearance is itself the Absolute which reconciles all differences by bestowing upon them whatever truth they may be said to possess.

Criticism of the Theory of Knowledge of Absolutism.— To criticise Absolutism it seems best to inquire briefly into the value of ideas, like the Absolute, Immanence, and Unity in Difference which are given a position of such prominence in every absolutist formulation of the theory of knowledge. That these ideas have a right to exist, and that they possess validity, no one can deny. The

[1] *Prolegomena to Ethics*, passim.
[2] *Appearance and Reality*, especially Chapter XX.

universe is certainly a whole, differences exist therein, but to identify the whole with its differences is either to do away with the whole altogether or to deny that any difference is possible. Again, thoughts are assuredly immanent. But immanent to what or to whom? To our minds, we would reply, but not necessarily to a universal mind, which is over and above the mind of each and every individual.

If only the Absolute Mind really exists thoughts are immanent to it alone, and by consequence, all individual minds *eo ipso* cease to exist. Similarly, there is a unity in difference but only on the hypothesis that man is unity, not that the universe is the whole of unity. For if man is not a unit, then the universe must be one; but if the universe is the only one, then man ceases to be a real unit. As Walker points out, "It seems to me that there is only one way of avoiding these difficulties, and that is to hold fast to our finite organisms, to our finite unities-in-difference and to our finite minds in which thought is really immanent, since these alone are known with comparative immediacy and certainty. Then, if our theory of an organic universe can be squared with the facts, well and good. But if it cannot, we must still abide by our facts, and in regard to theories must either attempt a modification or renounce them altogether. For Absolutism to adopt the latter alternative would perhaps be a mistake, since there are many ideas in Absolutism the value of which for human thought is very great. Nevertheless, its theory of the Universe as an Organic Whole cannot stand in its present literal form. It leads not merely to inconsistencies, as I have endeavoured to show; but it makes error, evil, pain, and man himself a hopeless mystery." [1]

[1] Walker, *Theories of Knowledge*, p. 294. Read this whole Chapter (X), and especially the portions relating to the theories of Green and Berkeley.

Perry finds three serious objections to Absolute Idealism [1] which he calls by the following names: formalism, equivocation, and dogmatism. By formalism he means, that in erecting its categories as all-sufficient explanations of reality, Absolutism, as a matter of fact, assumes too much, since its explanations fail to cover all that it pretends to explain. General concepts explain much, it is true; they are never quite adequate to explain all the richness, diversity, and manifoldness inherent in concrete objects. "Why this particular world should be as it is, one does not in the least understand from the bare conception of significance or meaning. This sacrifice of sufficiency to generality, this neglect of the insufficiency of purely logical categories, is what I mean by the error of *formalism*." [2]

The fallacy of equivocation arises from the use in an univocal sense of concepts which are purely analogical. While it is true that an analogy may carry us with security up to a certain point in our argument, beyond that point we may not pass without assuming that the applicability of the analogy in question is unlimited. Absolutism falls into this very error when it extends the logical concepts upon which it is based so as to comprehend all the realities of nature and of life. It generalizes concepts which are true of logic, and asserts them to be true likewise of all being. This error of equivocation, which runs through the whole of Idealism, and is particularly manifest in its use of such terms as "spirit," "mind," "personality," "good," and "evil," is, as Perry points out, the direct result of the efforts made to avoid that formalism which the logical categories essentially involve.

Absolutism is dogmatic, because it assumes a "maximum of knowledge" to be a full expression of the principle itself of

[1] Perry, *Present Philosophical Tendencies*, pp. 166–188.
[2] Op. cit., p. 167.

knowledge, and further, that this maximum is then synonymous with reality. If by this is meant that the Absolute possesses a knowledge of all things, such a statement adds nothing to our knowledge of what reality is. If, however, is meant the acceptance of the existence of one who knows everything as a whole, we can readily agree, with the animadversion that we are no nearer to an understanding of what reality is now than we were before. "But if there is any virtue in the absolutist principle itself, it must be possible to define a cognitive ideal in other than quantitative terms, not a knowing of *everything* merely, but a *perfect* knowing of everything. From what it is to know well, it must be possible to infer what it is to know *best*." [1]

Pragmatism.—*Pragmatism* [2] came into being as a protest against the "vague and meaningless abstractions of Absolutism." Its origin, like that of Objective Idealism, dates back to the critical philosophy of Kant. But it differs from Absolutism in this, that it is a development of the principles of the Critique of Practical Reason, while Absolutism

[1] Op. cit., p. 186. We may be pardoned for quoting this estimate of the weaknesses of idealism—"The source of the failure (of idealism) lies in the *extravagance* of the claims which it has made for those branches of knowledge which it has successfully vindicated. For idealism has sought to prove not only the universality, but also the spirituality of logic; it has sought to prove not only the independence of moral science, but its logical or universal character as well. And the result has been to confuse logic, and to formalize life." Op. cit., p. 192.

[2] For an exposition of Pragmatism, see James, *Pragmatism, A Pluralistic Universe, Some Problems of Philosophy, The Meaning of Truth;* Schiller, *Humanism, Studies in Humanism;* Bergson, *Creative Evolution, Matter and Memory;* Stewart, *A Critical Exposition of Bergson's Philosophy;* Lindsay, *The Philosophy of Bergson;* Dewey, *Studies in Logical Theory, Creative Intelligence, Reconstruction in Philosophy, Human Nature and Conduct, How We Think;* Bowden, *The Principles of Pragmatism.*

For a criticism, Walker, *Theories of Knowledge;* Coffey, *Epistemology;* Perry, *Present Philosophical Tendencies;* Pratt, *What is Pragmatism?;* Schinz, *Anti-Pragmatism;* Moore, *Pragmatism and Its Critics;* Leighton, *Man and the Cosmos, The Field of Philosophy;* Driscoll, *Pragmatism and the Problem of the Idea;* Turner in *Catholic Encyclopedia,* Article "Pragmatism."

stresses the principles of Apriorism and Immanence found in the First Critique.

The viewpoint of Pragmatism is experimental, practical, and evolutionary; it emphasizes the function of will as against the theoretical character of Absolutism, where the faculty of intellect is almost solely stressed. Absolutism is metaphysical; Pragmatism is dominantly epistemological and very contemptuous of metaphysics as such, despite the fact that it acknowledges what James calls metaphysical "affinities." The tendency of Absolutism is monistic, that of Pragmatism is pluralistic. At almost every point the two theories clash.

In trying to evaluate Pragmatism, it must always be remembered that its defenders claim for their viewpoint nothing more than that it is an approach, or better, a method of testing the truth or falsehood of theories. Few wish to dignify it with the title of a systematic philosophy. The somewhat inchoate and unsatisfactory state in which Pragmatism finds itself, because of the admittedly tentative character of its fundamental principles, makes a final and definitive statement of its position impossible. James himself frankly admits that his system is too much "like an arch built only on one side." [1] Due to the present unpopularity, which is on the increase in philosophical circles, of the pragmatic philosophy, such a statement may never be forthcoming. The only thing, therefore, remaining for us is to examine this theory as it is presented by its leading exponents, ever mindful of the fact that all of them are not agreed even on fundamentals, and that one's exposition as well as one's criticism of Pragmatism must be, in the nature of the case, highly provisional.

Pragmatism is, first of all, an epistemology which has come about as the result of the adoption of a method "of

[1] *Some Problems of Philosophy*, p. VIII.

settling metaphysical disputes that otherwise might be interminable." [1] In the face of problems which for generations have seemed well-nigh insoluble, the pragmatist takes courage, for, by the use of the empirical method, he feels confident that he can sift the wheat from the chaff and attain a truth which, although it may not be absolute, is perfectly capable of "working." There has been too much theorizing, speculation, a priori constructions in the past; what is needed, above all things, in present-day philosophy is the application of the experimental method, and the thinking and evaluating of principles in terms of human experience. It makes little or no difference to the scientist whether an hypothesis be true; it is of supreme moment whether his hypothesis works. The "working" of a theory is the test of its truth, not only in science, but in philosophy as well. For the philosopher, as for the scientist, "*theories thus become instruments, not answers to enigmas, in which we can rest.*" [2] The touchstone of truth is experience, especially human experience.[3] Pragmatism is, therefore, "*the attitude of looking away from first things, principles, 'categories,' supposed necessities; and of looking towards last things, fruits, consequences, facts.*" [4]

In the application of this method to knowledge, the pragmatist is very insistent on the point that what engages his interest is the process itself, and not the product, of thought. He studies *knowing* rather than knowledge. Now, knowing is essentially a human, a practical thing, and it is of value only in as far as it helps us to get in closer relation

[1] James, *Pragmatism*, p. 45.

[2] James, *Pragmatism*, p. 53.

[3] Humanism and Pragmatism are practically one and the same philosophy. Both accept the principle that what counts is human experience; that the value of an idea is to be measured by its possible adaptation to human purposes. For a detailed statement of the philosophy of Humanism, consult Schiller, *Humanism, Studies in Humanism*, and particularly, "Axioms as Postulates" in *Personal Idealism*.

[4] James, *Pragmatism*, p. 54.

with life. Experience alone counts, and any idea which assists us to understand a part of experience, or puts us into relation with experience, is true in so far as it does. Ideas are instruments, working devices, short cuts to truth.

Now, anything may be an idea, the only requisites being that it possess both meaning and utility. The fundamental principle underlying every form of Pragmatism is known as the principle of Postulation. In the search for knowledge we constantly *postulate*, that is, we try out truths for the purpose of discovering their consequences. All thought is of its very nature purposive; to be true it must satisfy certain "felt needs." Of course these needs include something more than the practical, in the narrow sense of the word. The term "practical" must be accepted in a very wide connotation, to include such needs as those of logical consistency, mental satisfaction, the harmonious grouping together of different concepts. The test of the practical is its "cash value" in terms of human experience, and the secret of the test is a universal postulation which, starting with a more or less provisional hypothesis, by experiment and observation, arrives at a truth which can be relied upon to work. The necessary and universal judgments of the older intellectualistic philosophies are thus done away with altogether. So-called axioms are nothing but postulates. Truth is not static; it is "ambulatory," progressive, relative to the individual thinker and his needs.

The pragmatic theory of knowledge is, as we have pointed out, an experimental one. All our knowledge arises from the data of pure experience, and is ultimately resolvable into sensations. What we know are our sensations. All reality is experience and nothing more, and knowledge can come to us in no other way. Ideas are, therefore, instruments or tools with which we work, and their truth depends on the practical consequences which flow from our use of

them. Moreover, knower and known are one and the same thing, for unless knowledge is experienced it cannot exist.

Now, our ideas do not represent any reality, at least in the sense that they copy reality. They represent merely our different experiences in this that they are substitutes for actual experiences. As such they have a useful purpose because they help us to economize in the matter of actual experience. Concepts are thus labor-saving devices; they are symbolic, not representative of reality. But the concept is evidently something more than a mere percept. It entails a synthesizing aspect which no percept as such presents. In order to explain the synthetic character, as well as the objective reference of thought, the pragmatists have invented what they call "felt-relations." Thoughts hang together because we feel the relations which must exist amongst them. The world of thought is nothing more than a world of experience in which thought is stripped of every characteristic of necessity and universality, and becomes simply a series of experiences bound together by "felt-transitions" and "felt-relations."

The evolutionary viewpoint is largely responsible for the reduction by pragmatists of all mental experience to sensation. While it is unquestionably true that sense experience lies at the basis of all knowledge, the pragmatist goes a step further than this fact and identifies all possible knowledge with sensation. This is an exaggeration. The symbolic, purposive character of our concepts, although undoubtedly a prominent mark of cognition, is generalized into a principle explanatory of the nature of our concepts themselves. There is no need for this generalization. For, while concepts may be useful, it is false to generalize and contend that utility is the very essence of conception. The principle of "thought-economy" expresses well a certain side of the knowledge process. But it should not be erected

into a generalization explanatory of the truth or falsehood of our ideas. Pragmatism has applied the evolutionary theory to the origin of our knowledge with the result that it has confused thought with will and the emotions, while it has sought to explain all three in terms of mere sense experience. Even granting the truth of evolution, it does not help a theory of knowledge to insist on leveling down all our mental experiences by attempting to explain them by a simplicity which is pseudo, and in no sense of the word real. Because knowledge arises from the united action of sensation, intellection, and volition, is no justification for asserting the three functions to be one and the same, unless we are determined to make all experience fit neatly into certain categories which we have fashioned beforehand.

To sum up, although Pragmatism is at first glance only a method of attacking problems, an attitude which we may take, it turns out to be, on examination, an epistemology. Since to know we must possess ideas, the pragmatist has analyzed for us his theory of ideas. Ideas are purely functional, the instruments with which we work. They are not representative of reality, which consists alone in experience. Experience is manifold but, when sifted down, amounts to what we call sensation. From this experience we arrive at truth, which is purely relative. Truth is not static; neither can it be verified. It is constantly, however, in the process of verification, and ideas, principles, or axioms are true, just as in far as (and no further) they assist us to attain a richer and wider experience. Ideas do not exist for themselves, but for us. The same must be said of truth. Not in any theoretic sense, but only from a practical and utilitarian point of view, may we judge the truth or falsehood of a statement. Any other value accorded to ideas, judgments, or to our processes of reasoning is purely fictitious, and can only land us back in the very midst of the useless

and interminable metaphysical discussions which have always disgraced the fair name of philosophy.

A great deal of the vogue which Pragmatism has enjoyed has been due, not so much to the reasons advanced by its proponents, as to its supposed suitability as a philosophy of life consistent with the approved principles of modern science. Intellectualism has failed altogether to satisfy mankind. To express life and knowledge in voluntaristic terms, and to test the validity of these deliverances solely on the basis of their value as instruments for the development of the same, appears to be a possible way out of an almost impossible situation. Pragmatists bespeak, therefore, for their theory an opportunity of demonstrating that it is quite as capable of solving problems and of reconstructing reality as any of the now much discredited idealisms.

As a matter of fact, Pragmatism lies at the heart of every philosophy, even though we may not recognize its presence there. For whether we know it or not, purposes dominate all our thoughts, giving to them both reality and validity, since "human motives sharpen all our questions, human satisfactions lurk in all our answers, all our formulas have a human twist." [1] So true is this that we may assert, without fear of contradiction, that Pragmatism is the universal philosophy. *Nolens volens* one uses it, whatever his position may be. It is compatible with any and every philosophy as long as that philosophy possesses consequences of a practical nature for life. As a method, it has always been used, quite unconsciously at times it is true. It remained for modern thinkers to conceive of it as a principle which might unify all speculation, and it is in the widest, most methodic, and general extension of the principles of Pragmatism to every field of knowledge and of life that we must look for its truth.

[1] James, *Pragmatism*, p. 242.

Criticism of Pragmatism as a Theory of Knowledge.—Two difficulties, external to the question at issue, are urged with great vigor by all pragmatists against every critic of the pragmatic theory. In the first place, it is insisted that the majority of criticisms are unfair in this, that they fail to represent truly the position of Pragmatism. Anti-pragmatists, as a rule, are guilty of the psychologist's fallacy, for they read into an opponent's theory what really takes place only in their own minds. Secondly, pragmatists deny in no uncertain terms the assumption of their opponents that Pragmatism is a philosophy. It is nothing more than a method, an attitude, and not a systematic philosophy at all. Now, it must be evident to all that to the above strictures no reply can be given which will satisfy the defenders of Pragmatism. The unprejudiced thinker, however, will take with a grain of salt the oft-reiterated statements that Pragmatism is not a system. Since it pretends to be a philosophy, pragmatists may call it by any name they please. Every one else will know it for what it is—a systematic philosophy. Similarly, we must use every possible precaution to guard against an unfair statement of the pragmatist position. But, granting that we have studied this theory in its leading exponents and practically formulated it in their own words, we may then, with an easy conscience, proceed to its refutation, disregarding altogether such statements—and many others to the same effect—that "the critics of Pragmatism seldom face this issue squarely." [1]

In the first place, underlying the epistemology of Pragmatism is the doctrine, or rather the philosophy of pure experience, according to which all reality is nothing but experience. In experiencing reality we literally make truth as well as reality, in as far as reality is capable of being

[1] Moore, *Pragmatism and Its Critics*, p. 132.

modified by our actions. Exactly what the pragmatist means by the phrase "making reality" is not clear. If by it he means to confound knowledge with action, he must deny that there exists a clear-cut distinction between the two, a distinction which no psychologist would give up without a bitter struggle. On the other hand, if "to make reality" must be understood in the sense that knowledge is equal to knowledge added to action, he is uttering a mere platitude. To extend the proposition to everything that appears to be objective is manifestly impossible. It fails altogether to explain the apparent contingency of that reality with which we are surrounded, and with which we must deal from day to day.

Moreover, the process of making reality, as far as men are concerned, could never have had a beginning. On no other supposition than that of Panpsychism can the philosophy of pure experience be made intelligible, and it is a fact worthy of notice that the leading defenders of Pragmatism and Humanism do not deny that their theories demand a world which is altogether mental. But Panpsychism leaves the origin of human knowledge as deep a mystery as it was before the theory was advanced.

Again, in a panpsychic world, what becomes of the self, of the Ego? My thoughts, my feelings, my experiences can mean nothing if there is no basis, no ground to group together the thoughts and feelings experienced by me. Such fundamental facts of consciousness as memory, conation, and purpose are both fanciful and fruitless unless they are the memories, the conations, and the purposes of somebody. If everything is experience, we are face to face with as unsatisfactory a set of abstractions as it is possible to conceive. Pragmatism has done away with the soul, but in doing so it must, at the same time, surrender all hope of ever being able to understand the unity of consciousness, and with

what necessarily follows upon that unity, the faculty of synthesizing the many in the one. "The pragmatic theory of knowledge, therefore, if logically carried out, either drives us back in Kantian Scepticism with its wholly useless and meaningless *Ding-an-sich;* or, if interpreted metaphysically, leads us on to a philosophy of Pure Experience which, of all philosophies, is the most hopeless, for its power of explaining the universe is absolutely *nil*, and as soon as an intelligent meaning is put on its atrocious terminology it at once bursts with discrepancy and leaves us no better off than when we started." [1]

It is objected again, that the much praised pragmatic method, when analyzed, means nothing more than that every problem must have a meaning, or if it does not, it is scarcely worthy to be discussed, and that furthermore, this meaning is dependent on our experience. Every one, no matter what his philosophy, will concede that much. But "when pragmatism attempts to go beyond these somewhat commonplace precepts, it lands in dogmatism and absurdity," remarks Pratt.[2]

Nor is the pragmatic conception of the category of utility, as a test of the truth of a proposition, of any great epistemological significance. While no one can deny that concepts have a practical side, the practical certainly does not exhaust the whole of the truth of any principle or concept. Ideas are indeed instruments, but they may be, and very often are, something more. The prime fault with Instrumentalism is that it generalizes an aspect of the thought process, making of it the sole function, while in reality it is only a part of conscious intelligence.

Pragmatism is individualistic, for it makes the experience of the individual, with the consequences to the individual

[1] Walker, *Theories of Knowledge*, p. 345.
[2] *What is Pragmatism?*, p. 45.

of every experience, the exclusive test of all truth. In this way, it hopes to avoid the note of "transcendental" which has always been a salient characteristic of the older knowledge theories. But it seems impossible to do away with the transcendental in every case where thought has for its object something other than itself. This is particularly true if our thoughts are of something within the experience of another man, as when I think of another man's toothache.

Finally, Pragmatism is nominalistic, that is, our knowledge turns out to be a knowledge of names, not of real things, and therefore never can be true knowledge. According to the pragmatist, ideas do not correspond to any reality outside the mind. They are merely mental processes, and possess no truth of themselves unless we adopt the pragmatic conception of truth, which holds that anything which satisfies one is, in so far, true. In this case, two men may have diametrically opposite experiences concerning one and the same object, and yet both would have experienced *truly*, despite the fact that both experiences cannot on hypothesis possibly be true. Error, or mistaken opinion, is therefore unthinkable on the pragmatic assumption. Here evidently is the crux of the whole knowledge problem. The pragmatist cannot deny that we are often mistaken. Yet how is it possible to explain a mistake, when the perceiver was entirely satisfied with his experience and, moreover, his experience worked out? Unless one is willing to acknowledge that things possess truth outside of any individual experiencing of this truth; or, to say it another way, unless one is willing to inject the transcendental note into our everyday experience, it seems impossible to draw any line of division between truth and error.

Truth or error cannot ultimately depend on *my* experience. There must exist outside of me some kind of criterion by which I can ascertain the truth or falsehood of any one

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of my experiences. For experiences do not merely exist, they mean something. And this meaning is not solely dependent on my experiences. There is a transcendental element in every cognitive experience, and we do not get rid of it by refusing to recognize its existence. Pragmatists contend that transcendence is a mystery; that until we solve it by simplifying all our knowledge processes and explaining them in terms of the most elementary processes of sense, both psychology and epistemology must forever remain full of mysteries. But "if transcendence is a mystery, it is at least a very real mystery, and the attempt to ignore it or to explain it away is bound to end in failure. It is not true that everything is like everything else. There are several things in this world which are *sui generis*—and one of these is knowledge." [1]

The Theory of Knowledge of Realism.—By *Realism*, we understand the doctrine which maintains that a real mind-independent world exists. Our thoughts correspond to this reality external to the mind of the thinker, and, by means of them, we both know and are justified in asserting that things exist. The plain man believes that he sees real objects; that his house, his automobile, his office are not creations of the mind, but entities possessing their own existence and certain definite qualities independent of any knowledge he may have of them. He likewise accepts the reality of his own thoughts, emotions, and feelings, and recognizes that others may have thoughts and feelings similar to those which he possesses. These beliefs of the man in the street are the foundation of every theory of Realism. From them the philosopher must start, and to them he must return when, in the course of his speculations, theo-

[1] Pratt, *What is Pragmatism?*, p. 71. We recommend that the student read the whole lecture "Pragmatism and Knowledge," pp. 135–171; also Chapter XII, "The Philosophy of Pure Experience," Walker, *Theories of Knowledge*, pp. 220–236.

ries seem to demand a reversal of these common-sense acceptances.

This does not mean that the philosopher accepts all the beliefs of the plain man without first subjecting them to criticism and investigation. He does, however, acknowledge as self-evident the universal belief that knowledge is possible. Moreover, he views the belief in the existence of the real world as a fundamental one, which demands explanation and even scrutiny, but which must not be assumed to be false preceding an investigation of its validity. It is altogether possible to tear our common-sense beliefs to pieces, and in the process we may discover many, if not all of them, to have been false or altogether inadequate. But it is illogical to commence a study of knowledge by an a priori statement that knowledge itself is impossible, or, if it be possible, that real things cannot be known by us.

The history of philosophy reveals to us many different kinds of Realisms. Very early, if it was not the first philosophy of mankind, the theory called to-day, Naïve Realism, held sway. Since then, with every refinement of philosophic and scientific knowledge, there has arrived a corresponding change in the attitude and the exposition of Realism. Modern thought has experienced many divergent statements of the realistic position. The Scottish School of Common Sense conceived it in one way; what we commonly call the New Realism, in quite another and different way. Our own position is realistic and dualistic, and is generally known as the Correspondence or Causal Theory of Knowledge. Historically, this theory dates back to the days of Aristotle. It was the dominant theory of mediæval epistemology, and, to-day, it is accepted by practically all those thinkers whose fundamental principles are Aristotelian, and whose viewpoint is that of a reasoned common-sense.

Naïve Realism or the Copy Theory of Knowledge.— According to *Naïve Realism*, the real object is the original of which the idea is a copy. Our ideas copy reality much in the same fashion as a sensitized plate reproduces objects to which it has been exposed. External objects are blue or red, hard or soft, long or short, and our ideas reproduce the same qualities. The relation between the object and the idea is explained by the contention that things give off particles or make pictures which, affecting the organs of sense, cause the mind to reproduce a copy of the object.

That this theory fails to explain how we come to know things is evident from the mere statement. For if Naïve Realism were true, it would be impossible to understand how it is that our senses often deceive us. Moreover, an object may appear one color to-day and quite a different color to-morrow; or it may appear large when viewed closely and small when seen from a distance. These, and many other similar variations in our sensations, cannot be accounted for by anything in the object. Their source must be sought at least partially in our ideas. Finally, the many instruments perfected by modern science prove beyond a doubt that our perceptions of color, distance, size, weight, etc., are mere approximations. Things as they really exist and are brought to us through the telescope, the microscope, and instruments of weight and measurement are very different from the same things as we perceive them by and through the unaided use of our senses.

However, it must be recognized that in spite of the falsity of the Copy Theory, the fundamental contention of Naïve Realism, that we actually and immediately perceive external reality is true. The falseness of the explanation does not necessitate a corresponding falseness in the fact. This point must be emphasized for the reason that many of the difficulties leveled against the Copy Theory, while

altogether justifiable as difficulties, do not entail, as their authors wish us to infer, a rejection of Realism as such.

Realism or the Correspondence Theory of Knowledge.— As a preface to our exposition of the realistic position, it should be recalled that Realism is not merely a knowledge theory or a method of approaching the knowledge problem. It is a systematic philosophy, with a very definite metaphysical basis. It must be presented and judged, therefore, as a whole. To separate one's metaphysics from one's epistemology is a sheer impossibility; and to judge of one's epistemology, divided from the metaphysical position he has taken up, is no less impossible. Such an attitude can only result in a patchwork criticism, or in a false evaluation of the total significance of the system itself. Realism presents innumerable difficulties, both as a metaphysic and an epistemology; no one is more aware of this fact than its defenders. But it also manifests a coherence, a consistency, a marvelous compatibility with the facts of life and of consciousness which merit for it the utmost consideration on the part of every one who is searching for philosophic truth, and is determined to embrace this truth, no matter where it shall be found.

As the bed-rock upon which every true Realism is built, we find the idea of God. God is the beginning and the end of all things. As God, He is unchangeable, One. He is also the source of all change, the final Unity in Difference. Being infinite He embraces all things, although free Himself from the limitations and inconsistencies of finite being. God is the necessary Being, and as such is dependent on no one or no thing. All other beings existing outside of Him are dependent upon Him to such an extent that without God they would cease to exist altogether. This does not mean that God and things

are one; neither does it mean that the two are separated in a way that one cannot influence the other. On the contrary, things depend on God both for their existence and their every act. But there is no identity between God and things. There is, however, a resemblance between God and objects which grows more marked as we proceed up the scale of existences to man who is made "in His image and likeness."

Another fundamental fact to be noted is that each finite being is a unit, complete in itself and distinct from every other being. Existing *per se* it is a substance, a unity in difference, and it possesses, moreover, qualities or functions by which it acts, and is capable of being acted upon by other substances.

But, it is the so-called accidents which make things different from one another. Since the accidents, no less than their ground, the substance, are real, the unity of the thing, its wholeness, is not destroyed whenever, for one reason or another, one of the accidents ceases to exist. Substance and accidents form a structural whole. But even substance is a composite of matter and form, an essential dualism necessitated by the phenomena of change which cannot be explained on any other basis. Accidents, too, are subject to differences, the accident of quantity corresponding to matter, while the other accidents correspond to form. These accidents receive determination from without as well as from within. Everything in the universe, therefore, is both active and passive, which distinction is particularly prominent in the higher animals, and especially in the sensitive and intellectual life of man. Neither animals nor men act haphazardly. Their actions arise as a result of certain needs, the main one of which is the instinct of self-preservation. Thus, to preserve their existence living beings are constantly performing

certain functions, that is to say, they are the causes of certain effects.

For the realist then, this universe is something more than a mere organism. It is a whole, and a very systematic one at that, which consists of an infinite God and a multitude of finite beings, each one a composite and each one a whole. There is change in the universe, but it comes about as a result of definite laws, and not by blind chance. Of course, we do not comprehend either the nature of things or the laws which they obey, but this is due to the fact that we are finite. So conceived, this is the universe which man knows; it is the object of his knowledge. Included in it is, of course, man himself, who possesses consciousness and with it, the power of knowing. For him, through sensation and thought, the universe is brought within himself. Since he alone, of all existents, is rational, for him alone therefore things possess meaning.[1]

The world is the object of man's knowledge. But in order to know, certain conditions must be fulfilled on the part of the knower. These conditions are satisfied by the functioning of the cognitive processes with which every knower is endowed—namely, sense perception and intellection. Sensation is both an active and a passive power or faculty, as also are intellect and will. Now, the problem of knowledge centers about the possibility of a knower coming into contact with what is known in such a way that he can be said to bring the known within himself. That we possess knowledge is an unquestionable fact; but how and by what means we come to it is a question altogether different. Since knowledge is an ultimate fact, no explanation other than a description of itself can possibly be given. Every man thoroughly understands

[1] Walker, *Theories of Knowledge*, pp. 346–372. Read the whole chapter of which I have given a very inadequate resumé.

what it is to know; few are able to define with exactness the conditions which must be fulfilled, both in the object and in the subject, before knowledge is possible.

Now, on the supposition that both knower and known exist as two independent beings, how, we may ask, can one affect the other in such a way as to make knowledge possible? The answer to this question may be stated simply in these terms, known and knower interact. Objects must somehow act upon the mind, and they do this by means of the body. Objects affect the end-organs of sense, setting up a series of neural movements which, after transmission to the brain, result in what we call sensations. Material objects, like light, heat, sound, etc., produce in the peripheral organs definite neural reactions which determine the kind of sense impression of which the mind becomes aware. By means of these impressions, the mind is in a way conformed to the object, but not in the sense that both become physically one. What occurs is that an image or likeness of the object is produced by means of which the mind perceives. It is this image as revealing objects, not the objects themselves, which we directly perceive. Some realists contend that we immediately perceive reality itself, the image being only a medium through which we perceive external objects. The epistemological question is not involved in this psychological dispute, since the problem at issue is whether the given in consciousness is external to the mind knowing, and both theories of sense perception answer this question in the affirmative.[1]

But the mind, as we have said, perceives something more than a mental image. It perceives objects, and the

[1] Coffey, *Epistemology*, Vol. II, pp. 64–69, and pp. 124–138. For a full statement of the psychology of sense-perception, see Maher, *Psychology*, pp. 42–96, and Mercier, *Psychologie*, Vol. I, pp 218–247.

reason for this is found in the nature of the perceptual process, which is to perceive objects by and through mental states. That these mental states possess an objective reference, is due first of all to a spontaneous judgment of external existence which underlies all perception, as well as to the principle of causality which assures us that the qualities which we think we perceive in things must actually exist there, otherwise we would have an effect without an adequate cause.

Supposing the sense organs to have been stimulated, and an image corresponding to the stimulation to have been formed in the brain, we next arrive at sensation proper. Now, the primary office of sensation is not to help us to discriminate every shade of difference which exists in objects, but to assist us in distinguishing one object from another. Sensations tell us nothing about the nature of objects, but they do tell us very well that objects differ, and they help us to understand these differences. If sensation gave us anything more than the ground lines which manifest qualitative differences in objects, its rôle as an instrument of knowledge would be considerably lessened, if not done away with altogether. Thus, sensations are accompanied by something more than a spontaneous judgment in the existence of extramental reality. They tell us a great deal about the qualities of things, both primary and secondary. We not only perceive objects to exist, but we perceive them as colored, hot or cold, of a definite shape and size, situated in space, etc. From which it follows that the qualities of things do not exist in the thing altogether independent of our perception of them. Neither must we confound the datum, as presented to the mind by perception, with any judgment we may make concerning the datum itself, nor with the processes of analysis and synthesis which are constantly

taking place in the mind at the same time that we perceive individual things.

Further, it must be noted that the so-called illusions of sense are no argument against the doctrine here set forth, which accords to sensation, over and above its affective, a representative value. Our senses certainly do not deceive us, unless conditions either in the object or knower are abnormal. No one can deny that there is a certain amount of relativity in every act of sense perception, but this only means that in order to perceive, conditions must be normal. Given these normal conditions, the otherness or externality of the objects which we perceive follows as a natural consequence from their perception by us.[1]

Passing from sense perception, we come to intellectual cognition which is knowledge in the true sense of the word for it alone connotes meaning and significance. That intellect and sense differ is not given in consciousness, but is a deduction from the differences we perceive in the objects which sense and intellect present to consciousness. Sensations make us aware of concrete individual things, together with their qualities. The intellect, being both a passive and an active power, not only receives the concrete presentations of sense but, abstracting from the limiting conditions of space and time, fashions a concept which is universal, that is spaceless and timeless. Latent in every individual thing, therefore, is a universal. By abstraction the intellect beholds this universal implicit in the sense impressions which are presented to it.

Intellect, therefore, depends upon sense for the material upon which it works. It must get its ideas from somewhere and, unless one accepts the doctrine of innate ideas, the only alternative remaining is that it is sensation which supplies

[1] Coffey, *Epistemology*, Vol. II, pp. 89–153.

them to the intellect. Viewed as process, conception is an individual act. But its product, the idea, is a universal.

Now this content of the intellect, that is, the idea, may be studied subjectively and, as such, it is a modification of the mind; or objectively, and it is a means by which we know something outside ourselves, it is an aspect of the concept which reveals to us something objectively existing outside the mind. These concepts of ours we call universals, or universal ideas. And it is of these precisely that the epistemologist asks—Are universal ideas solely products of the mind with no objective reference of any kind, or do they refer to an extra-mental reality which really exists and which is known by means of these ideas?

Realists contend that universal ideas have a real significance, for the reason that they originate in perception, and are determined by the objects directly perceived in sensation. Ideas, therefore, correspond to the entities which they represent. If intellect and sense functioned as two disparate entities, our general ideas would be the product of intellect solely, and by them we could never hope to arrive at anything like a knowledge of what things really are. As a matter of fact, intellect and sense function in unity. One may object that such a view makes of man a very complex machine. And such he is. But unless we view him as a unity, with a unit mind, knowledge itself would be impossible.

Intellectual cognition, therefore, is an interpretation of objects which functions through concepts or thought-objects which we predicate concerning other objects. The objective aspect of thought comes from sensation, not by a process of intuition, but by a process of abstraction, since objects contain the elements which the mind, rising above sense limitations, perceives and fashions into abstractions. Thus, for example, abstractions like being, substance,

change, causality, are contained by implication in all the data of sense experience. As a matter of fact, these ideas are so ultimate, so universally valid, that unless they possess objective reference all our knowledge would fall to pieces. Moreover, in spite of their abstract character, or really because of it, they are capable of being indefinitely multiplied and realized in individual concrete things.

To sum up, the position of the realist is that our concepts and our judgments, whether intuitive or not, are valid. They carry along with them a direct reference to extramental reality, they tell us something about things as distinct from mind. The same is true of reasoning, which is a complex form of judgment. While it cannot be denied that all reasoning involves postulation, still postulation is only the product of a more or less complicated process of the intellect and the will. Knowledge, therefore, whether we view it as a perceptual or an intellectual process, puts us into direct contact with reality. This contact involves a relation, a certain correspondence between the thing and the intellect. If this correspondence exists, we have true ideas; if it does not exist, we have false ideas. Truth is something more than a subjective conformity of our ideas with one another. Truth is objective, it possesses the quality of being impersonal, that is, of transcending any limitations which may be imposed on account of the fact that the individual knower is himself a contingent being. And upon this conception of knowledge and of truth must be built our philosophy of the criteria which determine for us the validity or non-validity of any particular fact of human experience.

Arguments in Favor of Realism.—If our analysis of the thought process be correct, it follows that all our judgments are ultimately dependent, both for their existence and their

objective relation, on the material which has been presented by way of sensation to the mind. Not theory, but facts revealed by means of introspection, acquaint us with this dependence of intellect upon sense. We assuredly perceive individual objects. Through sensation we are made aware of countless things, events, feelings. By means of abstraction from these sensibilia, we store up a mass of general abstract thoughts, out of which we afterwards interpret the new data presented in our manifold experience, as well as build up the framework of what is known by us as human knowledge.[1]

No direct proof, other than the testimony of consciousness itself, need be adduced in favor of the objectivity of the stimuli which cause our sensations. That the I, the subject of sensation, is essentially passive during the sense process seems an incontestable fact. If this be so, some explanation must be sought for this fact. Where can it possibly be found except in an acknowledgment of the existence of real beings capable of producing impressions within one? Real beings are, therefore, the causes of our sensations, and they must differ both from the subject who perceives and the sensation which is perceived, otherwise the whole perceptual process becomes a function altogether unintelligible.

One has only to contrast the dream image with that given by direct perception to become convinced of the fact that, besides images of a more or less subjective character, we also possess sensations whose objective relation is beyond all doubt.

Now, if sensation presents an essentially objective reference, we are bound to conclude that intellection too is no less other-regarding, for it is upon and out of sensations that

[1] For a full statement of the abstractive power of the intellect, read Maher, *Psychology*, pp. 294–313; also Mercier, *Psychologie*, Vol. II, pp. 40–82.

all our thoughts are constructed. Our sensations refer to this man, this color, this sound. But a man cannot be *this* man, unless he is first of all a man. By sensation, therefore, we perceive in particular what the intellect conceives in general. One cannot be real without the other. To deny reality to the objects which produce our thoughts, therefore, is to deny reality to our sensations as well. In a word, knowledge becomes impossible.

The above argument opens up the whole question of Universals, one of the most difficult of the problems of philosophy. Our contention is that the universal has a real foundation in the thing outside the mind, admitting at the same time that it is necessary to postulate the existence of a mind in order to give actuality to the universal. But supposing that mind does exist, we assert that the universal really is in the data perceived by sensation, since by and through intellect we may disregard whatever is temporal, whatever is particularized in individual things, and fix the mind solely on the qualities of things which are most general, as, for example, substance, life, matter, etc. Our thoughts and objects are thus brought together in a unity which makes clear to the perceiver that both his sensations and his thoughts refer directly to an object really existing outside himself.

Modern psychology proves beyond cavil the intimate dependence of mind on bodily functioning. Injuries to the brain or to the sense organs result in mental disturbances. Adults who have been born blind or deaf lack all concepts corresponding to the fields of visual and auditory sensations. Our mental activity is usually accompanied by corresponding sensations and imagery. On no other basis than an acceptance of the position that the object perceived both by sense and intellect is the same reality, can this dependence be understood. The senses perceive objects as con-

crete; the intellect conceives the selfsame objects as abstract. But it is the same real object which is apprehended in both cases.

Moreover, the senses, especially those of sight and touch mutually confirm the deliverances of one another and point to the real existence of a material universe outside the mind as the ground for this remarkable agreement. While exhibiting the tri-dimensional character of material things by widely different imagery, they agree as to the spatial relations of parts to parts of the objects perceived. If by means of sensations we come into contact with an actual world in which these spatial relations are real relations, it is easy to understand how the senses can agree. But if the world is a mere mental poem, it is very difficult to understand how witnesses, so widely divergent in their methods of approach and of statement, can be in such remarkable agreement.

There seems to be little or no difficulty, even amongst idealists, in acknowledging the real existence of minds other than our own. Such an admission is necessary to preserve us from the manifest absurdities of Solipsism. But minds do not reveal their existence to us except by external changes in the organisms which possess minds. I do not see the minds, I see the bodies of other men. That they possess minds is an inference from my perception of their speech, gestures, and actions. It is impossible, therefore, without grave offense to logic, to reject the deliverances of my senses concerning the reality of the universe, and to accept the same concerning the bodies of other men.

Modern science universally and freely acknowledges the real existence of the material universe. With the exception of a few scientists, who are what might be termed "symbolists," all physicists are agreed that it is the object existing outside the mind, and that alone, which determines the truth or falsehood of physical law. The scientist in his

investigations, it is true, is influenced by purpose, but only to the extent of selecting what objects he shall study and in what manner they shall be studied. When it comes to accepting the truth or falsehood of a theory, only facts as determined objectively influence his judgment. As Walker remarks, "The scientist freely admits that if scientific concepts and laws are to be verified, they must be determined by their objects and their objects alone; and the aim of experiment is to place conditions precisely in order that such a determination may take place." [1]

Criticism of Realism.—It cannot but appear to the plain man little short of astounding that any thinking person should question the real existence of the material universe or our power to know that it does exist. So widespread, if not universal, is this belief that one can call it into question only under pain of bidding defiance to the accepted dictates of common sense. In spite, however, of the universality of man's belief in the objectivity of our perceptions, many philosophers question their validity impelled to this position by the arguments of Kant who, after a very severe analysis of the knowledge process, came to the conclusion that the subjective element in it was of such major importance that it completely overshadowed the apparent objective element. Knowledge, according to Kant, is dependent on sensation, but sensation is not a simple act. It is a synthesis, in which experience and certain a priori categories join together to produce the so-called data of sense experience. The manifold which comes to us by and through sense intuition is caught up in the pure categories

[1] Walker, *Theories of Knowledge*, p. 475. The student should read the two chapters on "Pragmatism and Physical Science" and "Realism and Physical Science" in which latter it is proved that scientific concepts, as a matter of fact, are more than symbols since they are founded on experience. They correspond, in a very real sense, with reality and are therefore valid.

of the understanding, which confer upon them the universalizing element so characteristic of our scientific knowledge. Sensation gives us no true knowledge of reality when divorced from these a priori forms. Since sensation is a mere receptive faculty, it cannot produce anything separated from the mind, which is active and productive. Without the mental forms of space and time, sensation is meaningless, because it is particular and contingent. There is, therefore, included in every sensation something more than experience, something more than exists in consciousness at the moment of perception. There are elements which transcend any particular impression and, because of this transcendence, we must acknowledge them to be universal. Now, neither the element of space nor of time, both being universal and unlimited, is given in experience.

The principal difficulty which confronts the supporter of Realism hinges on his supposed inability to show how the mind, viewed as a conscious process, can possibly put us in touch with anything outside itself. Ideas are internal, are within the mind. Of these ideas the mind is certainly aware. But how can it, without divesting itself of its very nature, know something outside itself? The difficulty of understanding how any mental process can really represent something which is so remarkably different from itself as the material universe seems insurmountable.

In reply, the realist would deny the whole foundation of the above objection. Only on the Cartesian hypothesis, which sets up a false dualism between mind and body, can the objection stand. But it is not true that body and mind are two disparate substances, by their very existence cut off from ever interacting on each other. Mind and body form a unity, and the chasm which Idealism has dug between the mental and the physical is a purely imaginary one. No more mischievous error has come into modern

philosophy than the extreme dualism of Descartes. Until thinkers retrace their steps and acknowledge that mind and body form one living organism, the epistemological problem will ever remain the complete mystery it is claimed by some to be.

The fact that I can know, speak to, touch, converse with persons other than myself seems obvious. To deny this fact, because a suitable explanation is not at hand, appears to us very illogical. But the fact can be explained, if we are willing to acknowledge that the mind can and does perceive external objects by and through the organism of which it is the vivifying principle. Without the peripheral organs of sense, by means of which sensory impressions are received and later, through the sensory nerves, relayed to the brain, the mind would remain forever closed to external reality. But given the central nervous system, the objectivation of sensation becomes immediately intelligible. Nor is there any need for calling in habit or mental association to explain this process of exteriorization. In fact, every such explanation presupposes as already proved the very point at issue, namely, that the mind has begun to refer to external reality as the source of its own perceptions.

The realist will not question for a moment the fundamental conviction of every idealist that, without ideas, it is impossible to know. Manifestly, we cannot know any extra-organic reality save through sensation. But this is only half the truth. For the very essence of sensation is to acquaint us with the extra-mental. Sensation, viewed subjectively, is a mental function, but viewed objectively, it gives us information about things outside our minds. Although a process of the mind, it is at the same time an experience of the extra-mental.[1]

[1] For a full treatment of the psychology of external perception, Maher, *Psychology*, pp. 161 et seq.

To many minds, the most serious objection brought against the doctrine of epistemological realism is derived from a study of the tremendous influence which psychological and physiological states, antecedent to our perception of things, have upon our judgment of the same. Perception varies not only in different individuals, but in the same individual, according to the condition of the peripheral and central organs. The state of mind, too, of the individual, his feelings and prejudices, both color and shape the resultant mental product. Idealism has made much of this fact, exploiting it in countless ingenious ways. But the difficulty does not prove that sensations, in spite of the admittance of the mental which characterizes every one of them, have no extra-mental reference. Quite the contrary is true. Despite the great influence of mind in determining the nature of perception, perception itself is always other-regarding. The reference to external objects is clear and precise, as well as spontaneous. It is only after reflection and study that we arrive at a knowledge of the extent to which physiological and psychological states have affected the content of the perceptual process. This influence may or may not make our senses untrustworthy in any specific case. But that is a problem for psychology, and should not be confused with the truth or falsehood of the proposition which we maintain, namely, that through sensation we actually know the external world.

The argument of Berkeley, invoked in one way or another by all his successors, to the effect that, since a mind is necessary to perception, things cannot exist unless they exist in and for the mind, is an evident equivocation. In this argument the idealist falls into the "error of definition by initial predication," since he assumes that the world to exist must be approached from the standpoint of knowledge. With him knowledge and real existence are

convertible terms.[1] No realist would agree to any such assumption, for many things, as well as the qualities of things, may and do exist which are not known to any mind.

Nor is it a valid objection to contend that when we perceive sounds, etc., these sensations are totally different from the physical phenomena which produce them. Indeed, we may not know what vibrations of ether or air are, but we do perceive something vibrating, which is all that any realist shall contend for. As a matter of fact, both the order of ideas and the order of being exist, and any particular thing may belong to the one or other of these orders; for example, that of real existence, without, at the same time, belonging to the order of thought. While it cannot be denied that there is a very close connection between things and our ideas of things, this connection gives us no right to conclude that one cannot exist without the other. If we think a thing, manifestly it must exist in the mind; but, the converse proposition, namely, that because we do not think, therefore the thing cannot exist outside the mind, or that our thinking causes the thing to exist, is assuredly false.

The great influence which the Kantian view of perception has had on modern thought undoubtedly prevents many, even to-day, from accepting the position of Realism. They seem to feel that the Sage of Königsberg has analyzed more fully the conditions of knowledge than any of his predecessors, and that, therefore, his construction, in spite of the

[1] Perry, *Present Philosophical Tendencies*, pp. 126 et seq. "'The tulip which I see' is idea; and it belongs to the essential character of ideas that they should be in mind; hence it is contradictory to assert that 'the tulip which I see' is exterior to mind. If all redundancy and equivocation is eliminated, this amounts to the assertion that a tulip *when* seen, or defined as seen, is not a tulip unseen. But what Berkeley sought to establish was virtually the proposition that the tulip which I see can never be unseen; and this does not follow. For it is not contradictory to assert that the tulip which I see today was unseen yesterday, or that many tulips are 'born to blush unseen' forever. Berkeley's error lies in his inferring that because the tulip *is* seen, therefore its being seen is its essential and exclusive status."

difficulties it entails, is more acceptable than Realism which appears to them as a simple, even naïve, theory. No one questions for a moment the ingenuity of the Kantian analysis, nor the almost perfect logic which he displays in the elaboration of his fundamental theses. It is his fundamental theses, though, which are open to question, and it is against these that modern realism has directed its principal arguments.

For it is not at all necessary to assume, as Kant does, that because our sensations are particular and contingent, the elements of space and time, which enter into every one of them, cannot be given by experience but must come from universal and necessary a priori forms independent of individual experience. As we have already remarked,[1] Kant confuses real space with ideal space or imaginary space. Ideal and imaginary space come to us after reflection. Real space is given in each perception. We spontaneously attribute the "where" to different things and events as they occur. The same may be said of the time element in our perceptions. We do not, for example, say that a certain event occurred at such a date because our idea of it corresponds to any a priori forms, nor that an object is square, round, to the right of another object, for a similar reason. The temporal occurrence, no less than the spatial position of anything, is altogether independent of any or every percipient.

Kant was undoubtedly correct in his contention that the temporal and spatial elements enter into all our perceptions. We always perceive things both in space and time. But cannot this be explained on the natural assumption that all things really do exist in space and time? No one will deny that it is possible to call to our aid a priori forms as an explanation of this phenomenon. They seem, however,

[1] Supra, p. 159; also Coffey, *Epistemology*, Vol. II, pp. 184–202.

to become altogether superfluous if we follow the lead of our daily experience and acknowledge the real existence of an external world. In such a case it is altogether unnecessary to establish space and time as ideas prior to every experience. On the contrary, if we distinguish clearly between ideal and real space, we shall see that our idea of space is furnished by experience itself and that, without an experience of real space, we could never come to the abstract conception of space which Kant assumes to be at the bottom of all knowledge.

The New Realism.—The philosophy of Idealism was, until the beginning of the century, the dominant thought of the intellectual world, both European and American. Realism played a most inconspicuous rôle in modern philosophy during the nineteenth century. It has, however, experienced a decided renaissance, and is to-day recognized as one of the most important philosophical tendencies. "Natural realism, so long decently buried," remarked James,[1] "raises its head above the turf and finds glad hands outstretched from the most unlikely quarters to help it to its feet again." The pragmatist made the initial breach in the fortress so long held by Hegelian Idealism. The new realists have poured their forces through the opening made, and are to-day on the point of raising the flag of victory over the battered ruins of a defeated speculative philosophy.[2]

[1] *Essays in Radical Empiricism*, p. 40.

[2] For an excellent statement of the history and philosophy of the New Realism, see Kremer, *Le Néo-Réalisme Américain;* also the chapter "Recent Realism" in Leighton, *The Field of Philosophy*, pp. 280 et seq.; Macintosh, *The Problem of Knowledge*, pp. 211–309. Perry, *Present Philosophical Tendencies*, pp. 306 et seq., gives an authoritative statement of the realistic theory of knowledge. The following works will introduce the student to the philosophy of the New Realism: *Essays Philosophical and Psychological in honor of William James;* Perry and Others, *The New Realism;* Drake and Others, *Essays in Critical Realism;* Sellars, *Critical Realism;* Holt, *The*

The *New Realism* began as a polemic. Like Pragmatism, its pretensions do not rise higher than those of a philosophical method, an attitude towards the object of knowledge. Even now its followers are not agreed as to all its fundamental principles. They are, however, united in believing that the external world exists independent of our knowledge of it. Many even accept the position that the so-called first principles of knowledge, as well as those of logic, ethics, mathematics, and physical science, have an existence which is not dependent on our knowledge of them. However, the New Realism is not dualistic. It is "closer to the monistic realism of 'ideas,' suggested by Hume, than to the dualistic realism of mind and matter, propounded by the Scottish School." [1] It has been called a "neutral monism" because it practically reads out of the universe the independent existence of mind. Consciousness is not a unique kind of reality, and it does not differ very much from matter. The distinction between sentient and insentient should not be allowed. Most neo-realists are very chary of accepting an out-and-out materialism. Body and mind are made of the same stuff, we are informed. By calling this fundamental stuff, which is neither physical nor psychical, "neutral," they hope to escape the inconveniences of the older materialistic theories.

While the older realisms were all frankly dualistic and spiritualistic, the New Realism tends to a monistic and materialistic conception of the universe. Founded on a very radical empiricism, and in spite of its decided intellectualistic tone, the New Realism has not been able to shake

Concept of Consciousness; Marvin, *A First Book in Metaphysics;* Spaulding, *The New Rationalism;* Riley, *American Thought from Puritanism to Pragmatism.* The many controversies born of the realistic philosophy can best be followed in the volumes of the *Philosophical Review* and the *Journal of Philosophy, Psychology, and Scientific Method,* beginning about 1905.

[1] Perry, *Present Philosophical Tendencies,* p. 307.

off the positivistic character which seems to cling so tenaciously to every kind of empiricism. Its second characteristic, that of monism, is a result of its efforts to do away with the dualism which arises from an admission of the double distinction between mind and body, and between thoughts and things. In the place of this dualism, Neo-Realism advocates a relational view of consciousness. The idea of substance and accident is cast aside, and in its place is substituted the theory that the relations in which ideas find themselves constitute the whole of consciousness.[1]

That there is a great deal of good in the New Realism, no thinker can doubt. Its acceptance of the immediate presence in consciousness of the object known, its respect for the objective value of the truths of logic, its belief in the continuity of both the physical and psychical, are doctrines to which every dualist will subscribe. Its protests against the subjectivistic and essentially sceptical character of Idealism, no less than of Pragmatism, are sound and acceptable.

The materialistic and monistic aspects of Neo-Realism, however, are unacceptable for many reasons. In the first place, if the doctrine of neutral monism be true, there does not seem to be any adequate basis for the distinction between thought and its object.[2] Neither can it make clear to us why we acknowledge such differences, as we most certainly do, between objects actually perceived and objects merely imagined or dreamt. Memory, too, becomes an unexplainable function, since its very existence involves a definite continuity of the self. Finally, neutral monism is

[1] "The New Realism, while it insists, as all realism must, that things are *independent*, asserts that when things are known, they *are* ideas of the mind. They may enter *directly into* the mind; and when they do, they become what are called 'ideas.' So that ideas are only things in a certain relation; or, things, in respect of being known, are ideas." Perry, *Present Philosophical Tendencies*, p. 308.

[2] Leighton, *The Field of Philosophy*, p. 288; also Bosanquet, *The Meeting of Extremes in Contemporary Philosophy*, pp. 127–149.

only another, albeit a new, form of Materialism, since it regards the brain as the sole agency which attends to and selects out the objects which are to be presented to consciousness.

Both the facts of experience, and our reflection upon them, seem to point unerringly to the doctrine of dualistic Realism. Idealism, in whatever form it has appeared, is so remote from real life and the everyday experiences of each one of us, that only by defying the deliverances of common sense itself can we accept its philosophy. That the clue to an understanding of reality can be found only in the mind which perceives, since reality and mind structurally are one, seems to put back beyond all possibility of human effort the understanding of what reality is. We are, indeed, grateful for the unusual prominence given to the spiritual by objective idealism in its philosophical creations, but its insistence on the all-inclusive character of the mental, we feel, is out of all proportion to our human experience and, as a matter of fact, does not harmonize with it.

Realism is much closer to the truth in this, that it acknowledges that one can know truth by means of one's perception of objects existing outside the mind. That truth exists and is knowable by us, that the propositions of logic and mathematics, that the principles of ethics are valid, seem incontestable. The realist starts from experience and his analysis, most often, confirms the data of experience. The idealist starts from the structure of the mind, and ends up in a scepticism which casts doubt upon the very existence, not only of things but of the mind itself.

As for the New Realism, it has a great distance yet to go before it can hope to supplant the older realisms based on Dualism. In the first place, the ultra-behavioristic attitude which it has assumed in psychology will have to be

considerably toned down, if not done away with altogether. Its fear of the idea of substance, amounting in many cases to a veritable phobia, will have to be conquered. The theory of external relations is not strong enough to support a realistic epistemology. But the mind, as a living spiritual force, which "informs" the body is a conception which, if introduced into the New Realism, would do a great deal in leading that theory away from the monistic and materialistic tendencies which seem at present to dominate it.

Consciousness is not merely the presence of an object. It is an active force which declares to exist or not to exist that which it perceives or fails to perceive. Reacting to these perceptions, the mind, by means of judgment, discloses the truth or falsehood of any proposition. An epistemology which fails to take a definite stand in behalf of a dualistic metaphysic can never hope to combat successfully the inroads of a militant idealism upon its fundamental belief, namely, the reality of the existence of an external world.[1]

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CHAPTER VII

THE PROBLEM OF THE NATURE AND CRITERIA OF TRUTH

Philosophical analysis, as we pointed out in the last chapter, seems to confirm the generally accepted point of view that our perception of the external world is not illusory. Idealism, which would make ideas and things synonymous, as well as Pragmatism, for which ideas represent reality only as long as and in as far as these same ideas are useful, must yield to the superior evidence which has been advanced as favorable to the claims of Realism. We, therefore, take it as a settled matter of our philosophy that it is possible for the mind to perceive a reality existing outside itself.

The question now arises as to the value of these same perceptions of the external world. Do our ideas represent, and with truth, things outside the mind? If they do, how may we be assured of this fact? Again, if things and ideas correspond, how is such a thing as error ever possible? That many of our perceptions are erroneous, no one can deny. Our judgments, too, may often be in error. What is the difference, then, between true and false perceptions, true and false judgments? Are there any tests, guides, criteria which will assist us in giving or withholding assent to a fact or proposition when it comes before the mind?

All of us believe, almost instinctively, many things. We accept as certain the facts of daily life, the events of history, certain mathematical and logical formulas.

Spontaneously, assent is given to such a proposition as that a straight line is the shortest distance between two points, or, that two and two make four. Upon reflection and analysis, will such spontaneous beliefs be found legitimate and rational? In other words, can our everyday judgments stand a rigorous examination, both as to their origin and as to their content, and come out of the same stamped as true by us? That we do actually perceive an external world is in itself no justification for asserting that all our perceptions and judgments are true. Bitter experience proves to us, only too often, that many of our judgments may be false, despite the fact that we felt that they mirrored, and truly, reality. Something more than confidence in the real existence of the external world, and in our power to come into relation with it by means of sensation and thought, is necessary to justify our ordinary interpretations of reality.

No one can deny, without taking refuge in a suicidal scepticism, that we accept certain propositions as true. But are these propositions true, both in themselves and in our perception of them? Is what we call knowledge valid, or is it merely an approximation, more or less true, more or less workable, but never quite approaching an absolute standard which suffers no change? This is precisely the question of the validity of knowledge, which carries along with it another very closely related one, as to the grounds or criteria upon which truth or certitude must be founded.

Before dealing at length with this problem, however, it is necessary to take up one or two other problems, the solution of which very materially affects the reply one shall give to the question of truth and certitude. Not a little of the difficulty encountered by modern thinkers, in their attempts to settle this knotty question of epis-

temology, has arisen from either a false statement of the problem itself or from a false conception of the position and influence which must be accorded to the theory of evolution as explanatory of the origin and development of our ideas.

Scepticism.—The problem of the criteria of knowledge has been made unnecessarily complex because of the insistence placed by some thinkers on the elements of relativity found in all our perceptions and thoughts. It is pointed out that both the quality and intensity of our sensations are affected by the condition of the sense organs at the moment of perception, as well as by the sensations immediately preceding the one experienced. Not only the stimulus, therefore, but other factors modify the character of our sensations. For example, our judgment as to the temperature of a room depends upon whether we come into it out of the cold or have been in the room for a considerable time. The phenomenon of color contrast is too well known to need more than a passing mention. Now, may we not say the same of thoughts as we do of our sensations?

Of course, there is one sense in which all knowledge is relative, that is, objects must come into relation with a mind which knows them before knowledge is possible, and only is as far as they are present, can they be known. Moreover, psychologists acknowledge the presence of a certain amount of relativity in all our sensations. This does not mean, however, that the essence of sensation consists merely in the perception of differences. Quite the contrary is true. The fundamental note of the perceptual process is an awareness of a positive quality existing in an object outside the mind, not of a relation between two feelings. The condition of the bodily organs, of the

state of the mind, both previous to and consequent upon any given perception, affect, no one can doubt, our interpretation of the same. The quality of the thing perceived is in the thing, however, not in the mind, and given a perceiver who is in a normal physical and mental condition, what he perceives will be the quality of the thing and not his own mental states.[1]

As for intellectual knowledge, our thoughts, no less than our sensations, attain to the nature of reality. By this we do not mean to assert that there is no element of relativity in our intellectual processes. This relativity, however, is of such character that it does not affect the validity or worth of knowledge. Nor does this relativity come from the mind itself, which because of its peculiar construction, so shapes all the data presented to it that in the process of presentation and cognition these data are transformed by mental factors, of which we have no knowledge and for which we cannot make allowances.

The human mind is limited as far as the possibility of knowing goes, nor can it know unless objects are manifested to it. There are many things which escape the sweep of the human intellect, yet, of the things we do know, it must be said that our knowledge is legitimate and certain. The intellect does not simply copy or mirror reality. It is an active function and, as such, even constructs ideas which are purely subjective. But in this process of construction, the intellect clearly differentiates between what is objective and what is subjective. As Coffey points out,[2] the mind "through the exercise of its power of reflective introspection on its own cognitive processes can and does discriminate between the *real*

[1] Coffey, *Epistemology*, Vol. II, pp. 89 et seq., "Relativity of Sense Qualities to Perceiver"; also Maher, *Psychology*, pp. 171 et seq. on "Illusions."

[2] Coffey, *Epistemology*, Vol. II, p. 211.

which is *given* it to interpret, and its own subjective products, the various logical relations whereby it carries on this interpretation, *so that these subjective, 'constructive,' or 'constitutive' factors of intellectual cognition do not unconsciously fuse with, and transform or transfigure,* the extra-mental reality which is given to intellect and which intellect interprets by means of them."

Another distinction of primary significance for epistemology is that of the vital difference which must be acknowledged to exist between sensation and intellection. Sensation is not knowledge, strictly speaking. It is a mere awareness which, independent of the intellect, does not even necessitate our acceptance of the actual existence of the qualities perceived. While it furnishes the data and material for knowledge, it is only in judgment that truth or falsehood is asserted, and in which, therefore, there is true knowledge. While it is very difficult, as every psychologist will testify, to separate from our judgments the many sense elements contained therein, nevertheless these sensa are not to be confused with the purely intellectual factors in knowledge, like concepts, judgments, and reasoning, and upon which factors the truth or falsehood of our thoughts depend.

The sceptic, impressed by the relativity which he perceives in all mental processes, comes to the conclusion that, in order to attain truth, it is necessary beforehand to assume an attitude of doubt concerning the absolute validity of the knowledge process. He begins, therefore, by doubting about everything, even about the possibility of ever arriving at truth.[1] This is the method which Des-

[1] There is one characteristic of the sceptical attitude, to which Ladd calls attention, and which the student must understand if he would appreciate the reasoning of many modern thinkers. "At present the *Zeitgeist* is inclined to be confidingly dogmatic toward metaphysical postulates put forth in the name of physical science, but intensely sceptical toward those upon which repose the traditional views on subjects

cartes used, and since his day the usual manner of formulating the knowledge problem has been profoundly influenced by this sceptical attitude. Modern thinkers, instead of asking whether our ideas are true or false, formulate the question in another way. They ask whether the mind can possibly attain a knowledge of reality, or how can the mind be convinced that its products truly represent the extra-mental. To state the problem thus is to misstate it. We can never know things in themselves, or as they really are, if by the "thing-in-itself" we understand things divorced altogether from the knowledge process. In order to be known, a thing must be brought into relation with the mind. Moreover, the mind is an active power and cognition an immanent act. If this be true, we cannot possibly have a cognition in which the subject plays no part.

Another point to be noted is that knowledge of reality by no means exhausts all the kinds of knowledge of which we are capable. Certainly, the most important part of the cognitive process does not have to do with reality *qua* reality at all, but with the relations between objects, whether these objects exist here and now or not. To narrow our inquiry to real things is to suppress altogether the problem of truth in so far as it affects all the abstract propositions which lie at the basis of science.

Scepticism proceeds from a wrong starting point. Instead of beginning with our judgments, it starts from sensation. But truth does not lie in sensations, as we pointed out. Truth consists in perceiving the agreement or dis-

of morals and religion. An hypothesis like the conservation or correlation of energy, or like Darwinian evolution, gains a comparatively easy credence from otherwise sceptical minds. It may even put forth the virtual claim adequately to represent the ultimate principles of the life of all that is really Existent. But the dogma of Theism, that this really Existent is One self-conscious and rational Person, can with difficulty obtain a fair hearing even when it appears in the shape of a modest petitioner for the place of an hypothesis." *Introduction to Philosophy*, p. 147.

agreement between a subject and predicate, that is, between a thing now perceived and an abstract idea known before. Scepticism puts the cart before the horse, and in doubting about everything, becomes hopelessly involved in the meshes of its own doubts. Obviously, it is impossible to construct any test which will stand up under an attitude which doubts the truth of all tests, and even of the validity of the mental process itself in its function of validating the claims to truth of any proposition. We must begin, therefore, by accepting the possibility of knowledge, and that the mind can attain truth. Walker calls this starting "from methodical and rational assurance." This does not mean that we should not be sceptical concerning many of the deliverances of mind, nor that we must accept uncritically all that bears a specious resemblance to truth.[1] Error is a fact. What we must look for then are criteria which will help us to determine when we are in error. When these criteria have been discovered, we will then be able to point out the causes of error, and thus avoid it.

Evolution and the Validity of Knowledge.—While few, if any thinkers of the present time, are out-and-out sceptics,

[1] Külpe, *Introduction to Philosophy*, p. 191—"Many of the ideas that 'occur' to us, and many of the observations that we make are wholly lacking in the permanent value and universal validity that would entitle them to rank as scientific results. Hence what Hume called the 'academic doubt' is a necessary concomitant of all honest zeal for knowledge. It prompts to manifold variation of conditions, to repeated consideration, to unceasing test and trial. Under this aspect scepticism is an important part of the education of every investigator. And its methodical advantages will be especially fruitful in metaphysics, where it teaches the enquirer rightly to appreciate the worth of reasons and the force of arguments, and so helps him to take the concepts and theories of previous systems at their true value."

As for methodical scepticism, Külpe rightly states: "The sceptical standpoint cannot be made consistent except by the complete renunciation of the right to judgment or assertion. Even the statement that we cannot know anything, and the reasons alleged for it, must be adjudged dogmatic from the point of view of a radical scepticism. He who holds that nothing is demonstrable will not attempt to demonstrate that he can know nothing. In other words, scepticism in its absolute form is self-destructive."

many are imbued with the sceptical tendency. The theories which they profess as to the origin of mind, as well as to the genesis and development of knowledge, logically lead to a denial of the possibility of the human mind ever attaining certitude.[1] For if no knowledge can possibly be absolute, and all knowledge is in constant flux, in a state of making, then what is true to-day may be false to-morrow, and vice versa. Truth, for the evolutionistic psychologist, is a matter relative to the state of culture of the individual or the race. Now, there is progress in truth as there is in life. Just as the universe has evolved out of a simple primordial mass into the highly complex and differentiated forms which we call living things, so mental life, and its product, knowledge, have had an analogous development. Truth, too, is constantly changing. The whole trend of Evolution seems to caution us against putting any limits to the possibilities of the human mind, neither can we, with any assurance, contend that any body of so-called truths will be able to stand up unchanged under the critical examination of a more scientific age than the one in which we live.

Particularly in the fields of religion and philosophy are the traces of development found. Religious belief has passed through a series of changes, beginning with animism and ending with the spiritual interpretation of Christianity now prevalent. That a future generation shall accept our religious ideas is declared to be unthinkable. The same must be said of philosophy. The feverish philosophical activity of the last one hundred years, coupled with the astounding advances made in scientific knowledge since the days of Copernicus, bid fair to produce a new philosophy totally different from anything which has, up to this, been presented to the human mind for its acceptance. From

[1] Maher, *Psychology*, p. 286; Mercier, *Psychologie*, Vol. II, pp. 40–94.

the modern evolutionary point of view, the culture of humanity, religion, philosophy, science, art, are the products of growth. Just as mind has evolved from the lowest forms of sensation to the most highly complex types of reasoning, so the cultural history of the race has been a progressive advance from the crude beliefs of prehistoric man to the achievements of modern science.

Without entering into a discussion of Evolution, either from the biological or psychological angle, certain facts should be pointed out which negative, to a great extent, the sweeping conclusions drawn from Evolution by many contemporary thinkers.[1] In the first place, "the extension of evolution," as Howison remarks,[2] "from this limited and lowly scope in the region of life into a theory of cosmical reach, and, still farther, into a theory of the *origin* of life, and then of the origin of *mind*, is an act for which science furnishes no warrant whatever."

That human knowledge is capable of increase and progress seems so obvious that no one would question the fact for a moment. But growth in knowledge does not necessarily involve the falsehood of previous truths. On the contrary, it seems to postulate a certain amount of stability if we would understand how truth grows. Growth simply means that our knowledge has been widened, not that the old knowledge has been rendered false by the new. Since such is the ordinary progress of growth in knowledge, the substitution of one theory for another does not require an acceptance of the statement that what is true has become false. Often a theory considered true by many people is found false, but from this it does not follow that all our so-called truths are mere approximations. Because the

[1] Coffey, *Epistemology*, Vol. II, pp. 235–244, and Walker, *Theories of Knowledge*, pp. 419–448. The whole chapter "Development and Validity" should be read.
[2] Howison, *The Limits of Evolution*, p. 11.

ancients accepted the Ptolemaic astronomy, while to-day we know that this system is false, assuredly we cannot argue that knowledge itself is relative. The Ptolemaic System was *never* true. Theories, hypotheses, viewpoints change, but the very fact that they change indicates that they were not considered absolutely and universally true. The recognized instability of many hypothetical formulations is justification for asserting that certain established truths are beyond the possibility of being changed, or proved false by means of further research.

The history of human culture is a record of constant advance. Both individuals and the race have gone forward. There has undoubtedly been a great deal of adaptation going on, both in the realm of ideas and of institutions. But have there been changes in truth itself, in the evolutionary conception of the word change? As far as common-sense knowledge goes the reversals "have for the most part affected only (1) traditional and irrational beliefs which were by no means universal, and (2) hypothetical interpretations of natural events which were little more, and as a rule claimed to be little more, than rough guesses." [1] In theoretical knowledge, there has occurred a number of more or less significant reversals. We must not forget, however, that the science of antiquity was of a specially tentative kind, and its advocates were well aware of that fact. Many of our modern theories are, it is true, contradictions of the older views. In other cases, they are but developments of truths already quite generally accepted. In no case, can we maintain with assurance that an established truth has been completely reversed and proved to have been false.

Finally, knowledge consists in, as we shall demonstrate below, the conformity of reality with our thoughts of reality. Our judgments are true if they correspond to objective

[1] Walker, *Theories of Knowledge*, p. 438.

reality, otherwise they are false. Now, it is manifestly impossible that objective reality be one to-day, and quite another to-morrow. Reality is reality. If my mind truly represents reality, my judgments are true. No other mind can represent it differently than mine, and represent it truly. For truth is not of one mind. The quality of impersonality, of objectivity, which adheres to every truth, manifestly lifts truth above the fluctuations of time and the limitations of the individual mind. If this be a valid conception of what truth is, then the process of evolution does not affect it in the slightest. As a matter of fact, evolution accounts neither for the origin nor the genesis of our ideas. Much less then should it be invoked as an argument favorable to the sceptical attitude towards the epistemological problem, which views knowledge as intrinsically and essentially modifiable, and finds in it changes of so sudden and radical a nature that what appears to be knowledge may not be knowledge at all.

Dogmatism.—To approach the problem of truth, either from the sceptical or evolutionary angle, is to seal beforehand the doom of all our efforts. Either one of these attitudes, if consistently and logically followed out, can beget only confusion and misunderstanding. Many thinkers, recognizing this fact, start with the postulate that we can know truth. This is called the dogmatic attitude, and since the days of Kant the word *Dogmatism* has been given to every system which assumes, before investigation, the validity of any assumption at all, with reference either to the nature of truth or to the possibility of attaining the same. Used in its widest sense, Dogmatism would include all kinds of knowledge, even the investigations of science. Ordinarily, however, the term is narrowed to the field of philosophy, in which it signifies a school of thought which

puts no limits to the acquisition of knowledge on the part of the human mind. Accepted in this sense, it is practically synonymous with *Rationalism*. Descartes, Leibniz, and especially Spinoza, are good examples of this type of thinker.

There is, however, an aspect of Dogmatism which, if correctly understood, can be defended. Certainly, we are not justified, preceding all investigation, in asserting that the mind can attain truth. But if, after an inspection of our mental acts, it is proved that our assent to certain propositions is truly objective, then we need have no fear in holding that the mind can attain truth. Such procedure, we believe, is both possible and legitimate, as proved by daily experience.

With reference to our judgments, it is necessary to distinguish the immediately evident from those (and they are by far the majority) the identity of whose predicate with the subject is not evident. These latter, of course, we cannot accept until after they have been subjected to close criticism and study. Propositions immediately evident we accept the moment we understand what the terms imply, for example, that $5 + 7 = 12$. It is true that many such judgments involve other general propositions, upon the truth of which they depend. But finally we must come to a proposition, or propositions, incapable of further demonstration. The truth of these latter indemonstrable propositions arises from a comparison of the very terms which compose them. We see immediately that subject and predicate cohere. Their truth is practically forced upon the mind, which reflects upon them; and their very evidence makes it impossible to demonstrate their truth, since demonstration would entail other propositions more fundamental than the one in question, which by hypothesis is impossible.

To approach the problem of truth, therefore, with any

hope of solving it, two assertions of a quasi-dogmatic character must be made: first, that we do assent spontaneously to certain propositions, and secondly, that the mind can, by means of reflection, examine these assents so as to determine their validity. This position, however, does not involve us in the assertion that scepticism is *eo ipso* false, nor that we must accept dogmatically the truth of the thesis, prior to investigation and criticism, that the mind is capable of knowing truth. Such an attitude has practically disappeared from modern philosophy, and is now of merely historical interest.[1]

Criticism.—*Criticism* is an attitude which contends that before accepting as certain any principles or postulates whatsoever, as likely to be of value in the solution of the problem of certitude, it is necessary to subject these assumptions to a severe examination. Even the faculty of reason itself must be critically tested in order to find out to what extent it is capable of leading us to truth.

Kant is the father of modern Criticism, and he was brought to this position by the inconsistencies and illogicalities apparent in the thought of his predecessors, who, arguing from certain principles of more or less universal applicability, arrived at the most absurd consequences. Kant argued that we must proceed in an entirely different way, and he began by studying reason itself so as to discover how far and how much of truth we were capable of perceiving over and above all possible experience. The human intellect is fixed in its range of knowledge, and this range is determined by the amount of experience possible to the mind. The mind, therefore, not only recognizes but constitutes knowledge.

[1] Külpe, *Introduction to Philosophy*, p. 187; Mercier, *A Manual of Modern Scholastic Philosophy*, pp. 357–361; Perry, *Approach to Philosophy*, p. 186.

Positivism accepts the principles of Criticism, but denies the right of metaphysics to exist, a right which Kant did not question. It differs from Criticism in this, that it confines all knowledge to "positive knowledge," that is, knowledge acquired by experimental methods. Only upon the basis of information which we have secured by means of scientific investigation and research, can truth be attained. It is the work of philosophy to organize and systematize our scientific achievements. Speculative philosophy, as such, is fruitless, as the history of thought abundantly proves. Comte, the founder of French Positivism, has had many followers, especially in England, the most prominent of whom were John Stuart Mill and Herbert Spencer.

The specific contribution of Criticism to the epistemological question is its method. Before Kant it was customary to view the world as either a unit or a composite of real beings. He reversed this standpoint and transformed the world into objects of consciousness. At the basis of his attitude was the postulate of apriorism, by which he assumed that the object known conforms to the mind, and not vice versa, according to certain internal factors which are a necessary and constitutive part of the mind itself. His method naturally led to scepticism, against which he fortified himself by contending that the only secure foundation for transcendental truth lies in the moral subject.

The followers of Kant, especially Hegel, developed the absolute elements contained in the master's philosophy, while not forgetting his critical approach. Although many of the doctrines of Kant are not accepted to-day, Criticism still wields a great influence. To state the epistemological problem otherwise than Kant did, in the opinion of many thinkers, is to misstate it. "Since Kant the philosophical spirit has been strongly imbued with the critical principle.

No attempt at the construction of a new synthetic philosophy can now gain attention without appearing, at least, to stand toward all previous schools and thinkers in the position of a free sceptic and critic. And yet it is since Kant that the most stupendous systems of philosophical dogma have arisen—though chiefly upon German soil—which the world has ever known. Fichte, Schelling, Hegel, and all the earlier luminaries shining largely by light borrowed from them and from Kant, and now later Schopenhauer, Von Hartmann, and Herbert Spencer have built up great synthetic structures with extreme scepticism toward the results of previous thinking, and with equally extreme confidence in their own power to attain something approaching a final philosophy. Each thinker has perhaps contributed something permanent toward that completer system of associated principles of all Being and Knowledge which constitutes philosophy. But each system seems destined in turn to have many of its positive conclusions regarded as unwarrantably dogmatic, and subjected to a new process of sceptical analysis and critical reconstruction." [1]

Even Pragmatism has not been able to divest itself entirely of the critical starting point. In this the New Realism has been more successful. While recognizing the need of a careful analysis of the reasoning faculty before making assertions as to its capabilities, Realism has refused to submit to the Kantian viewpoint and has begun its synthesis at the only point from which success can be expected, namely, by accepting the proposition that truth itself is independent of our knowledge of it.

The Meaning of Truth.—Assuming that we can know an external world, it does not follow, as we have already pointed out, that our knowledge is true. For truth is not

[1] Ladd, *Introduction to Philosophy*, p. 153.

the same as objectivity. We may know things without knowing them truly. But if we can know, certainly there must exist standards by means of which it is possible to ascertain the truth or falsehood of our knowledge. As error is a fact, so also is certitude. We will begin, therefore, our treatment of the criteria of truth by outlining, first of all, our conception of truth. What do we mean when we say, I know that this is true?

To the plain man, not only our knowledge, but even things possess truth. A thing is true when it corresponds to the idea or type by which we represent the nature of the thing perceived to ourselves. Truth so understood is objective or ontological. But there is another kind of truth, which is a possession of our intellects, and consists in that quality of judgment which follows upon a pronouncement of the intellect to the effect that two ideas are identical and represent an identity which exists objectively between the things so thought of. This is formal or logical truth, and is purely a relation between ideas.

A true judgment, it should not be forgotten, means something more than the perception of the identity or non-identity of two ideas. Over and above this perception, there is also a mental affirmation or assertion that the predicate and subject are identical. Truth, therefore, consists in a relation of correspondence between our judgment and the thing. Whenever a proposition is presented to us, and it is clearly perceived that the terms of the same correspond, in other words that the relation is one of identity, the mind accepts this proposition and declares it true. If, on the contrary, the identity is not perceived, we assert either the proposition to be false, and this is error, or the mind remains in a state of suspense, a state which we call doubt.[1]

[1] Coffey, *Epistemology*, Vol. II, p. 245; also Mercier, *Criteriologie*, pp. 30–38.

Neither absolutists nor pragmatists, we shall see below, accept this idea of truth. Both of them rebel against the correspondence theory, yet both can scarcely fail to admit that the object must in some way assist in determining the truth or falsehood of our judgments.[1] The idea of correspondence is found in the critical philosophers who see truth only in a systematic whole, Reality, yet recognize that there must exist a conformity between our finite minds and this Real Whole if we are to possess truth. Pragmatists, too, acknowledge that for working purposes, and provisionally, at least, it is necessary to hold the correspondence theory. Therefore "the correspondence notion has an excellent claim to our attention since it would appear that after all there must be some kind of correspondence between the mind of the knower and the object which he knows."[2]

Truth, therefore, according to the realist, is a conformity or correspondence of the intellect knowing with the thing known. In order to determine the validity of this correspondence, certain criteria must be formulated which will clearly demonstrate whether our thoughts have been determined objectively or not. To make clear what we mean by this correspondence or conformity, certain facts must be kept constantly in mind. A great deal of the present-day opposition to the Correspondence Theory has arisen from a failure to understand correctly what is meant when we say that to possess truth the intellect must conform to the object perceived.[3]

First of all, the relation of correspondence is a relation for which we cannot find an exact analogy in nature. As thought is thought, and unlike every other operation, so

[1] Walker, *Theories of Knowledge*, p. 621.
[2] Walker, *Theories of Knowledge*, p. 622.
[3] Coffey, *Epistemology*, pp. 248–251.

the conformity of the mind and its object is a very special conformity, for which it is impossible to give illustrations. To compare it with painting or photography or any similar physical process which reproduces an object as a picture, is unjust to a relation which differs *toto cælo* from photographic reproduction. Joachim falls into this error when he writes: "What the painter sees in the face, *that* he expresses in his portrait; and the portrait will be more or less 'true' or 'faithful' according to the painter's insight, and, again, according to the mind of the spectator who sees and compares both the original and the picture. Even the photographer's camera 'can lie,' i. e., fail to produce a 'true' representation of its subject. And though a chronicle may, from one point of view, 'correspond' detail for detail with the historical events, yet for its reader, even if not for its writer, it may be radically false. For it may entirely miss the 'significance' of the piece of history, and so convey a thoroughly false impression." [1]

Every realist will agree with Joachim that the mind not merely reproduces but interprets reality. Yet from this admission, it is a far cry to the statement that "correspondence appears to give us at best the mere externals of what constitutes truth." [2] A photograph gives the mere externals, but mental correspondence cannot exist unless it gives us reality. The mind is not a camera; it is the mind, and when it acts it acts as a mind. Again, because the correspondence between mind and object is admittedly inadequate, is no justification for the statement that "correspondence is a symptom of truth." [3] No judgment, no matter how penetrating, conforms the mind completely with reality, for the simple reason that the human mind is finite, limited.

[1] *The Nature of Truth*, p. 16.
[2] Joachim, *The Nature of Truth*, op. cit., p. 17.
[3] Joachim, *The Nature of Truth*, op. cit., p. 17.

We know things, and truly, but beyond our knowledge there always remains something further to be known of the real before we can say that our knowledge exhausts all the possibilities of the object. This limitation is purely negative. In no sense of the word does it make what knowledge we actually possess false. It is quite different, therefore, from the positive lack of correspondence which signifies for us an erroneous judgment.

We must repeat again that truth is only of judgments, not of sensations, not even of concepts. And judgment consists in a judging, in an assertion by the intellect of the agreement of a thought with reality. It is not a copying of reality. In spite of all our expostulations to the contrary, many thinkers, and in this the pragmatists sin most often and grievously, insist on expounding correspondence in the terms of a copy theory. But grant that the real is given, the mind actively takes up this real which it interprets, and, by analysis and synthesis, affirms or denies the correspondence of this real with its thoughts concerning the same. If the reality has been presented correctly, a correct interpretation, other things being equal, will result. But if, on the other hand, the reality is falsely presented or, if we fail to interpret it correctly, error naturally results.

Finally, on the part of the reality known, no realist understands by a real thing, the thing as it is in itself. The "thing-in-itself" is and always remains a nonentity as far as knowledge goes. In order to be known, the thing must be brought into relation with a mind. Now, if this condition or requirement be interpreted as vitiating the validity of our knowledge, then that is an end to the whole question of knowledge. For knowledge is a process essentially involving relations. To try to understand it without taking this fact into consideration is to attempt the impossible. Unless a datum is given or presented, the mind would for-

ever remain closed to all reality. As a matter of fact, the real is presented by means of both our perceptual and conceptual processes. These presentations we interpret. If we affirm the correspondence of our ideas with these data, we have truth, because our affirmation expresses an identity which is truly objective; otherwise, we have error.

The Coherence Theory of Truth.—Absolutism [1] views the universe as One, which according to the laws of logical necessity, is continually unfolding and expressing itself in human centers of experience in a multitude of forms, each one a partial expression of the ideal content of reality.[2] There is development in knowledge, but this development consists not so much in additions to what we already possess, as in reconciling differences in a higher synthesis. Truth cannot be stable. It is in a process of constant modification and can only and finally be attained when we have arrived at a complete and final synthesis of all knowledge. Reality is one, is a whole, and to be known adequately, must be known as a whole. "As such it is the Object which we seek to know, the Ideal towards which our knowledge tends, and the Criterion by which it must be judged." [3]

If knowledge and reality are one, what then is truth? Joachim tells us that "anything is true which can be conceived. It is true because, and in so far as, it can be conceived. Conceivability is the essential nature of truth. And to be 'conceivable' means to be a 'significant whole,' or a whole possessed of meaning for thought." [4] Although

[1] For a complete statement of the Coherence Theory, see Joachim, *The Nature of Truth;* Bradley, *Appearance and Reality;* Green, *Prolegomena to Ethics;* Bosanquet, *Logic.* For a critique, Walker, *Theories of Knowledge,* pp. 506–526; Coffey, *Epistemology,* Vol. II, pp. 286–290.

[2] Cf. supra, p. 30.

[3] Walker, *Theories of Knowledge,* p. 506.

[4] *The Nature of Truth,* p. 66.

not all absolutists conceive reality in the same way, all agree that truth is a manifestation of the Absolute in finite minds. If those truths experienced by us cohere and form a systematic whole, we have truth. Now, truth of its very nature reflects the constitution of the mind as well as the constitution of reality itself. Only as a systematic whole can it be known, and "the work of intellectually constituting that totality which we call the real world is the work of knowledge." [1] And "the truth, the fact, the reality, may be considered, in relation to the human intelligence, as the content of a single persistent and all-embracing judgment, by which every individual intelligence affirms the ideas that form its knowledge to be true of the world which is brought home to it as real by sense perception." [2]

Both the nature and the test of truth, therefore, consist in the harmonious systematic coherence of all our judgments with one another. As Leighton puts it, "the Absolute postulates of knowledge are the logical identity of every object of thought with itself, and the harmonious organization or relevancy of all true judgments to one another in a systematic whole." [3] This test, of course, assumes certain definite principles, which require examination before they ought to be accepted. In the first place, consistently with the principles of Absolutism, it postulates for the mind a final and determining influence in effecting what is true. It likewise denies that single judgments have any truth when made alone and out of relation to the whole body of truth which is One. Neither can any single judgment be classed as necessary, in the sense that it is independent of the whole. Finally, its doctrine of relations is one which concedes to relations the power of modifying their terms.[4]

[1] Bosanquet, *Logic*, Vol. I, p. 3.
[2] Bosanquet, *Logic*, op. cit., p. 3.
[3] *The Field of Philosophy*, p. 541.
[4] Walker, *Theories of Knowledge*, p. 508.

Criticism of the Theory of Coherence.—The standard which is set up by absolutists as a criterion to determine the truth or falsehood of our judgments appears, on examination, not only inadequate, but even false, if we are to understand that coherence is put forward as the exclusive test of truth. What is the meaning of the phrase that truth is "the systematic coherence of a significant whole"? If truth and reality are one, the only reality we can speak of is the reality known to us, that is, reality as revealed to us in the whole system of judgments which mankind regards as making up knowledge. Naturally, any judgment which fails to be in coherence with this set of accepted judgments is false. And as knowledge advances the coherence becomes more and more systematic and, therefore, better able to represent real things as they are. Coherence, therefore, is a test of truth, or better, a condition of truth, because new truths cannot contradict old truths. The force of this standard, however, is purely negative, since we can easily imagine a series of judgments which do not contradict one another, yet are as a matter of fact false. For practical purposes, the coherence test is of little value, since to compare two theories in order to find out which one coheres the more systematically with the whole body of truth is, if not impossible, at least very difficult.

Moreover, the coherence theory presupposes a certain amount of correspondence between thought and reality, because our apprehension of the consistency or inconsistency of any particular judgment in relation to the whole demonstrates that we have weighed the evidence beforehand and found the judgment true or false. If there be any doubt in our minds of the coherence of a particular judgment with the generally accepted body of truth, we begin immediately to reflect, to weigh the evidence favorable or unfavorable, and we decide the coherence on the basis

of this evidence. No one can question that the harmony of one judgment with what we already know points to the truth of that judgment. Coherence unquestionably makes that judgment appear most probable; it becomes for us a good working hypothesis; we may even assert it provisionally. But to prove the truth of the same, something more than consistency is required. We want to know whether it conforms with reality, and not reality as a whole, but reality as expressed in the individual judgment which asserts or denies conformity. If we do not possess some true judgments which are independent of the truth of the Whole, then it would be impossible to have any knowledge at all. We must begin somewhere. It is manifestly impossible to begin with the Whole of Reality.

Again, to assert that only the Whole is true, and that isolated judgments cannot possess truth until they are caught up in the coherence of a systematic whole, is a mere corollary from the fundamental assumption of Absolutism that truth is in the whole, not in its parts. Both reason and experience rebel against any such assumption. In fact, all men accept as true many judgments of a contingent character. I can say with truth, that to-day it rained, or that John Smith is a banker. This contingency of fact cannot square itself with the universal and necessary note which must characterize knowledge revealing itself to us as an unfolding of the Absolute in finite experience. No one can deny that we experience facts of a contingent character. In contrast to this experience, psychology is witness to the presence in the mind of ideas which reveal a necessary relation obtaining between certain abstract objects of thought. This distinction between contingent facts and necessary relations is one which our daily experience forces upon us.

Finally, we cannot grant that, because each related

judgment bears a relation to the whole of truth, it is thereby intrinsically affected and modified to the extent that it must change as we progress in our knowledge of the whole. However, the matter "rests entirely upon the view that one takes of relations. If relations are a kind of physical nexus binding objects together and arising simultaneously and on the same level within an organic whole, then it is doubtless impossible to know an object without knowing its relations; but if the relations are essentially dependent upon the nature of the objects related, though not *vice versa* as well, then it *is* possible to know an object without knowing its relations; and, as those relations become known, one's previous notion of the object will not necessarily have to be changed, but will merely become larger, fuller and more significant." [1]

The Pragmatic or Utility Theory of Truth.—In contrast to both the Coherence and Correspondence theories of truth, the Pragmatic theory is anti-intellectualistic. It does not discover truth in the intellect, nor in any relation between the intellect knowing and the object known, but in the will which is, by its very nature, drawn towards truths which are "useful." Pragmatism, therefore, discards intellectual criteria as tests of truth in favor of voluntaristic criteria.[2]

What is truth in the pragmatist philosophy? Truth is a working process which leads us to reality. But the mind does not copy reality, and it in no sense of the word represents reality as it exists outside the mind. Ideas are mere

[1] Walker, *Theories of Knowledge*, p. 520.

[2] For an exposition of the pragmatic theory of truth, see especially James, *Pragmatism, The Meaning of Truth;* Dewey, *Studies in Logical Theory;* Schiller, *Studies in Humanism; Humanism.*

For a critique, Walker, *Theories of Knowledge;* Driscoll, *Pragmatism and the Problems of the Idea;* Schinz, *Anti-Pragmatism;* Pratt, *What is Pragmatism?;* Jeanniere, *Criteriologia.*

symbols or tools with which we work. Truth is, therefore, essentially relative. Its provisional character must be recognized, for what is true to-day may not work to-morrow. Truth is in evolution just as nature is. We cannot accept our immediate experiences as they appear to us. We must distinguish in them between appearance and reality, between primary and real reality. Now, our experiences which work are true—at least provisionally. Truth is not static, but "ambulatory." It is essentially a process, not a product, for it is constantly being made. And it is an individual process, since it changes with each individual mind. There is no such thing as Truth. Only truths can exist. "*True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we cannot.* That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known as." [1]

While many thinkers will agree that Pragmatism as a psychological description of the making of truth is fairly accurate, they cannot accept its philosophy of the truth relation for the reason that pragmatists confuse two things totally different from each other, namely, truth as it exists in our minds and truth as trueness, that is, the quality of an idea which makes it true. As Pratt points out: "We all agree that verification is essential to the making of a claim into a truth, but the pragmatist draws from this the conclusion that the *truth* (*trueness*) of the claim depends on and consists in its verification. This, I maintain, is a flagrant case of using the word *truth* in two perfectly dis-

[1] James, *Pragmatism*, p. 201. Schiller takes a wider view of truth. He looks upon it both from the evolutionary and humanistic side, in which the true gives way to the good, the dominant element of human experience. At the bottom of all our postulates are human purposes and these in turn are determined by their usefulness. Action is primary both in life and knowledge, and all truth is founded on practical consequences.

tinct senses as if it meant the same thing both times and as if it had but one meaning. It is a confusion between a 'truth' and 'trueness.'" [1]

Moreover, the pragmatist definition of truth as a process which leads to reality fails to take account of the very obvious distinction which exists between the nature of truth and the consequences which follow upon the possession of truth. No one doubts that when our ideas work out successfully we are very apt to consider them true. But it is not the functional aspects of truth which constitute truth. Functionings follow upon truth already constituted, are an added justification for accepting the correspondence already perceived by the mind to exist between its thoughts and external reality.[2] We do not, therefore, "make" truth in the sense in which James uses the word, namely, that truth and the verification process are identical.

Finally, the pragmatic conception of truth is pure subjectivism, and leads logically to scepticism. Pragmatists, as a rule, openly and with some heat, repudiate the sceptical conclusions inherent in their principles. Nevertheless we cannot escape the sceptical tendency of pragmatism, if we accept their descriptions of truth to mean what they say. Both James and Schiller are fond of painting the almost dominant influence which each man's ideas and ways of looking at things have in the making of truth. Moreover, they insist that our needs and interests color and even

[1] Pratt, *What is Pragmatism?*, p. 88.

[2] Pratt, *What is Pragmatism?*—"In spite of the fact that all ideas in some sense work themselves out, it is not true that all 'ideas,' judgments included, are merely plans of action. A judgment has at least two different aspects. From one point of view, it is indeed a motor idea which influences conduct and works itself out. From another point of view it is an assertion about some reality not itself, and between it and that reality there is a relation which simply is not to be identified with the results of the judgment." The student should read the whole chapter; also the chapter "The Value of Pragmatic Truth" in Walker, *Theories of Knowledge*, pp. 550–588.

"transfigure" truth. All knowledge, therefore, is human, that is, it is relative to our faculties, and if this does not mean that truth is purely subjective the words have no meaning. Pragmatists, to escape this conclusion, invoke many arguments, but to no avail. They claim that in the verification process truths are subject to a certain control from the side of objective fact and experience. But, as Walker remarks, even allowing that "the 'workings' of thoughts may be controlled by real objects, they can have no strictly cognitive significance if their origin is subjective, their value determined by interest and purpose, and if they do nothing more than enable us to manipulate experience." [1]

There is a great deal of truth in Pragmatism, as there is in every philosophical theory. The fault with the theory is that it fails to view the truth relation as a whole. Certain elements are brought out, overemphasized, and made to do duty as exclusive explanations, when as a matter of fact they are only partial explanations. Truth does possess a regulative value, and it often corresponds to felt needs and purposes. Both of these conditions will be admitted readily by every frank intellectualist, as he will also admit that the older epistemologists did not make enough of these facts. But do they prove what the pragmatist wishes them to prove, namely, that truth is purely personal, a subjective relative affair, or rather do they not prove that our knowledge is only partial, that it never exhausts the full content of reality, and that all knowledge, even of the most highly speculative kinds, corresponds to certain felt needs and, in the last analysis, satisfies them? Neither life nor knowledge is static—a fact beyond all controversy. But to hold that knowledge is dynamic need not mean that it cannot possess consistency and absoluteness, neither does it mean

[1] Walker, *Theories of Knowledge*, p. 581.

that the only human needs worthy of satisfaction are those of a purely practical kind.

Criticism of the Utility Theory.—It is impossible to separate the pragmatist's description of the truth relation from his criteria of truth, since he identifies the relation itself with the processes by which we arrive at truth. For the pragmatist, truth and the process of verifying truth are identical. Now, verification when analyzed means practical consequences or utility. A judgment is true when it works out, when it supplies human needs or furthers human purposes and life. But these practical consequences, one will say, are many. The criteria of truth, therefore, are as numerous as the practical consequences which can be observed to follow upon our acceptance or rejection of any judgment.

The fundamental, and most far-reaching criterion of truth for the pragmatist is one based on the relation of any idea to action. "Truth must make a difference to action," they tell us. Now no one can doubt that truth influences action, or that, as the psychologists say, ideas tend to exteriorize themselves. But that this cannot be a comprehensive test of truth is apparent when we consider that many truths exist which do not make any difference so far as action goes.[1]

Consistently with his principle of reading out of court all

[1] That the practical point of view, looked at merely as a reaction against the older and narrowly intellectualistic conception of the problem of knowledge, possesses elements of value which we are obliged to recognize, and should appropriate, no one can deny. Pragmatism represents this tendency, which it has pushed to unacceptable extremes when it subordinates the intellectual and the abstract to the biological and the practical. The present-day thinker should use what there is of truth in the biological viewpoint. He must not succumb to the false idea, however, that truth is exclusively a biological process, and that the only test of what is true must be found in its human values. Truth is not merely a means to an end. It is an end in itself, and as Pratt declares, "it is time to call a halt and to reassert the old and trite thesis that to know the truth is worth while for its own sake." (Op. cit., p. 237.) Lecture VI "The 'Practical' Point of View" is both a clever and exhaustive analysis of the pragmatic attitude and should be read *in toto*.

intellectual criteria, the pragmatist substitutes for them emotional tests. He tells us that for a thing to be true it must "satisfy our emotional needs." But every one must recognize that emotional criteria are the weakest imaginable, even if we grant them the right to be called tests at all. So unstable, so variable are our emotions that to appeal to them as to the truth or falsehood of a judgment would be to introduce nothing less than anarchy into the truth relation. That our emotions prepare us for the acceptance of truth, that they have a controlling influence, at times, in our assent to truth, is a matter of everyday experience. Pascal pointed this out. But man is not a thinking animal in the sense that thought is all and animal nothing. He is a complex of intellect, will, and emotions. Human emotions and their satisfaction must, therefore, be given a place not only in every true psychology, but also in every true epistemology. Neither the functions of intellect, nor of will, nor of the emotions, must be exaggerated. In the determination of truth, intellect is supreme. We believe a thing because the intellect is convinced, not because our emotions are satisfied.

Further, we are told that "utility" is a criterion of truth. Utility may mean many things, and we can readily imagine a meaning of it which would include ideas which are useful but which cannot possibly be true. If utility is a test, we may well ask ourselves—useful to whom? Surely the individual cannot be the final judge of the usefulness or non-usefulness of an idea. And even if the consequences of a truth are unquestionably useful, they can only be so provided beforehand our knowledge was justified, that we knew the thing to be true. "The pragmatic criterion of utility, therefore, is not of the least value when it is a question of distinguishing between facts which are '*really real*,' and facts which only claim to be real." [1]

[1] Walker, *Theories of Knowledge*, p. 600.

Utility is at bottom the pragmatist's criterion and, though he expresses the idea in countless different ways, these may all be sifted down to that particular one. We are told that "truth must be consistent," that it is "at bottom a habit," that "social agreement" makes truth, or that everything "is true which gives us the maximal combination of satisfactions." All of which translated means that judgments are true if they are useful, false if they are not useful.

The pragmatist, therefore, is a subjectivist both as to his conceptions of the nature and of the criteria of truth. He rejects the correspondence view and, quite logically, contends that if our ideas do not represent reality, we must accept or reject them on the basis of the practical results which follow their possession. Fundamentally, it is a question of whether the true comes first or the good comes first. If a thinker starts from the voluntaristic assumption, he will inevitably land in Pragmatism. But if voluntarism is false, and we believe that it is, then it is impossible to accept the pragmatic epistemology without doing violence to both our fundamental conceptions of the rôle of the intellect in the knowledge process, as well as to our everyday experience of fact. [1]

The Correspondence Theory.—As was demonstrated in the discussion on the meaning of truth [2] it is impossible to conceive of truth outside of a relation of correspondence or conformity between the intellect perceiving and the object perceived. The realist not only believes that objects really exist, but also that our ideas truly represent these real objects to which they are conformed. Between "esse" and "percipi" we claim a fundamental distinction. A thing may

[1] Walker, *Theories of Knowledge*,—the whole chapter "Pragmatic Criteria of Truth" pp. 589–620, contains a trenchant critique of Pragmatism. I have tried to reproduce, but very inadequately, a few of the arguments contained in that chapter.

[2] Supra, pp. 217 et seq.

exist and not be perceived, and things may be perceived which do not really exist. But if our ideas truly represent a reality which does exist, then our ideas are true.

Both absolutists and pragmatists reject the correspondence theory as a final explanation of how we know things, notwithstanding the fact that both admit knowledge to be impossible unless some sort of correspondence is acknowledged to exist. This correspondence, however, they feel is only a provisional, a beginning step in our understanding of the knowledge process. It does not make clear what knowledge is and upon what precise factors knowledge depends.

Knowledge is *sui generis*. A great deal of the misunderstanding of its nature arises from the futile attempts made to discover in nature some sort of process which is like the knowledge process. Knowledge is neither a photographic copying of reality nor is it a slavish reproduction of what exists extra-mentally. For an object to be known it must come into relation with the mind, it must become abstract. Now, psychologically, the thought-object is neither singular nor universal, if looked at from the side of its content. Universality is not a primary property of our ideas. Upon reflection, and after comparison with the same impression from which it has been abstracted, the mind will determine whether it be singular or universal. But in itself, as an object of thought, it is merely abstract. This is a most important consideration whose significance for the correct solution of the knowledge problem can scarcely be exaggerated.

Moreover, things are singular. But when they are taken up into the mind they lose their concrete characteristics, that is, their time-space conditions, and become abstract. Because we cannot know the thing-in-itself is no justification for arguing that we cannot know the thing as it is pre-

sented to the mind. Further, by an act of reflection the intellect declares this object-in-itself to be capable of being applied to a great number of concrete things, that is to say, it universalizes the abstract thought. Universality in no sense of the word is a part of the concrete things to which the universal idea is applied. Thought only is universal.

In the making of truth, the mind conforms to the object. If our universal ideas are applicable to real objects, a correspondence arises between them and things, and we have truth. But some one may say that to assert a correspondence seems to leave the problem unsolved, or, at most, to tell us very little of what the truth relation is. This would be a justifiable objection if we were dealing with two objects whose natures are the same. But the mind and things are on entirely different levels—one is material, the other is spiritual. If the mind conforms to reality, it can do so only according to the laws of its own nature. To be known, things must become thoughts. And our thoughts are true when they have been determined by the thought-object in the manner which has no analogy elsewhere in nature. Of course, this does not mean that the mind operates in a haphazard fashion or that we cannot lay down certain rules which will help us to know when, as a matter of fact, thought has been determined by its object. Such rules are not only possible, but we shall attempt to formulate them. They are, however, rather criteria of error than criteria of truth. The realist proceeds on the assumption, a very natural one, that the intellect can and does attain truth. Not only knowledge, but truth is possible—this is his starting point. It is as natural for the mind to know as it is for a bird to fly. Therefore, whenever the intellect functions normally the realist is convinced that it arrives at truth. What he is interested in then is not in trying to prove that the intellect cannot know truth, but in seeing that it acts

normally, and in laying down, after a close psychological study of the knowledge process itself, those conditions which are required to preserve it from going wrong.

Error, therefore, assumes a very important place in the realist's construction of truth criteria. Error is lack of correspondence. It is a positive disconformity between the content of thought and the nature of the object which it pretends to express. What brings about this disconformity? Something other than the object, for if the object conformed we would have truth. Therefore, if we can point out all the different ways in which the lack of correspondence may possibly arise, we shall know at what times the intellect is not to be trusted, and, by exclusion, we will also know that under every other circumstance it is to be trusted; in other words, we shall know when we possess truth.[1] Over and above the negative tests there is a positive criterion of truth, namely, evidence, which we shall examine later on.

Truth is only in judgments, but our judgments are of many kinds and are made up of materials acquired in many different ways. Sense images affect judgments; habit influences them, and, finally, thought itself, viewed as an active process, is often determined by the purposes which it seeks to realize. From each and every one of these three sources, erroneous judgments may develop.

In the first place, error may arise because our senses do not report faithfully concerning the objects about which they give us information. Sensation as such never gives more than the appearance of things, what I see, what I hear, what I taste. At times these appearances are false, due not to the essential relativity of the sense process, but because of certain irregular conditions either in the object perceived or in the senses perceiving. For example, if I look at an object through colored glasses it will appear

[1] Walker, *Theories of Knowledge*, pp. 627 et seq.

colored, or if I am suffering from color blindness I will not be able to perceive a certain color which actually exists in an object.

Much is made of the so-called illusions of the senses. However, they are relatively few, compared to the large number of admittedly true sensations we daily experience, and, moreover, we are able to guard against any error, even in them, if we see to it that all abnormal conditions, both objective and subjective, are carefully considered before passing a final judgment. In the case that doubt still remains or that we desire a more accurate account than our perceptions furnish us with, we should have recourse to instruments whose reliability is beyond question.

Imagination, too, is a fertile source of error, since it sometimes produces illusions, hallucinations, dreams, and other abnormal mental phenomena which deeply influence our judgments of reality. The psychologist, however, has examined these illusions and found their sources to be either certain mental or non-mental influences, and has set up a series of rules which will guide us in differentiating between true and false images. For the normal man there is no reason why illusions should falsify his judgments, except rarely. Even in these infrequent cases, he can readily discover upon reflection, the source of this error and correct his judgment accordingly.

Again, there can be no question of the fact that habit plays an important part in the making of our judgments. It is operative particularly in the field of memory. Now, in spite of the great interest manifested in the investigation of memory processes by modern psychology, little is known of the real nature of memory. That memory has a physiological basis, few will deny. It is this working of the brain centers and connected nervous tissue which may be the occasion of error. If we accept this fact, no matter what

our theory may be as to the exact manner in which the residual effect of each nervous action or thought is impressed on the brain, then, when there arises any question as to the accuracy of the deliverances of memory, we must have recourse to written records or to other tests in order to check up its truthfulness.[1]

Pragmatists insist at great length on the distortion of truth caused by the overwhelming influence of purpose in the constructive activity of the mind. Now, while it is true that purpose may lead us into error, it does not do so generally or as a matter of course. On the contrary, the influence of purpose as often as not seems to be quite the opposite of that which the pragmatists declare it to be. For purpose determines the "intent" but not the "content" of thought; and the facts which the mind, led by purpose, studies remain facts, although we may select for study one set of facts in preference to another.[2]

The conclusion from the above seems to be that no intellectual function considered in itself leads us into error, unless we assume, as the Hegelians do, that thought necessarily transforms its objects, or, as the pragmatists do, that purpose essentially modifies all our thoughts.

In particular, judgment functions correctly when all conditions are normal. Our judgments are of two kinds. Some have to do with contingent facts, and are determined by facts as they really exist outside the mind. Others relate to necessary principles, that is, are our immediate judgments of the ideal order, and are determined by the very nature of things as known by the mind. If our single judgments

[1] Walker, writing of the functioning of habit, as it expresses itself in expectancy, says: "Expectancy is seldom the cause of error. It may lead to a momentary illusion, but this is usually corrected spontaneously and immediately. Only in abnormal cases does expectancy lead to a false judgment, as in pathological cases, and in preperception, where the conditions are those placed by the experimental psychologist." *Theories of Knowledge*, p. 633.

[2] Walker, *Theories of Knowledge*, p. 635.

are to be trusted, assuredly the same must be said of our reasonings which are simply explicit statements of the truths already contained in true judgments.

Every one must and does recognize that we do not give full assent to all the judgments we make. But in these cases of doubtful adherence, we do not think that we are in error. We simply know that we have not yet arrived at a truth to which we can unconditionally assent. In cases where no doubt or hesitation remains, we assent fully, and we possess truth.

Now what, one may ask, is the inner fundamental motive for assenting? It is the very evidence of the object itself as presented to the mind. We believe because the object forces us to. It is evident, it is obvious to the mind that two plus two equals four. Not only does the mind see the ground upon which it bases its acceptance of that proposition, it also sees that it must assent because the ground is really there as it is perceived. Objective evidence, therefore, is the determining factor in our acceptance of every proposition. It is, likewise, the controlling motive of the mind's assent. Many may not think this a very strong criterion of truth, but it is the only positive criterion there is, and it is the one which every man uses. [1]

Realism acknowledges the existence of other criteria than the supreme criterion of objective evidence. These criteria are, however, secondary and derived, and while they possess undoubted methodological value, are in no sense of the word ultimate. In fact, if taken singly and independently of the supreme criterion, they are altogether insufficient. The realist knows but one final test of truth, the evidence which follows upon a careful study of anything we wish to know.

To the objection that such a test gives us only a proba-

[1] Coffey, *Epistemology*, Vol. II, pp. 256 et seq.

bility, we may reply that unless certitude is something quite different from what the great majority of men believe it to be, objective evidence gives us not probability but certitude. Neither is objective evidence some sort of magic key which opens up the kingdom of truth. The intellect must labor to acquire this evidence, it must analyze and scrutinize all the data presented to it. If, after a careful examination, the intellect is convinced, then we may be assured that the terms of the proposition presented are evident. For no other reason would the intellect give its assent.[1]

Pragmatists often contend that the test of objective evidence would make the process of attaining ultimate truth mere child's play in every realm of human knowledge. Such, however, is not the case. This objection is a mere travesty of realism for every realist knows that it is impossible to possess the same kind of evidence for the ultimate questions of philosophy or of religion as we have for the ultimate problems of mathematics. There is quite a difference between the cogency of the evidence we may possess for one set of truths as against another, and the distinction between the truth of judgments and the credibility of judgments is a very real distinction. Some judgments are spontaneous. We are compelled to assent to them by an irresistible impulse, as is the case in the self-evident axioms of mathematics. Other judgments do not compel universal assent. I feel certain of their truth, I am convinced that my judgment is correct because the evidence

[1] The student should read Newman, *Grammar of Assent*, Chaps. VIII and IX, where is described in a masterly way the Illative Sense. While Newman approaches the problem of certitude from its psychological side, nevertheless his conclusions justify the epistemology of the realist who believes that we can know truth, and that the primary test of truth is its objective evidence. Newman knew well all the criteria propounded by Pragmatism, but he did not exaggerate their place in the knowledge process. With him, "product is not confused with process, content with intent, the various processes and methods by means of which truth is attained with the real objective validity of truth itself." Walker, *Theories of Knowledge*, p. 648.

justifies my belief, notwithstanding the fact that many are not convinced as I am.

The conclusion that we are forced to, after this somewhat lengthy examination of the problem of knowledge, is that man can know truth and that there exists a criterion by means of which he can distinguish truth from error. Both of these conclusions are based upon a dualistic metaphysics and are confirmed by our everyday experience. It is precisely here that Absolutism with its coherence theory of truth fails to measure up to the requirements of a workable explanation of reality. Absolutism, because of its monistic assumptions, can scarcely hope to represent adequately human experience. In particular, so lifeless, so otherworldly, so far removed from our manner of thought, is its fundamental postulate of an Absolute Whole that we can only accept it for metaphysical reasons and without relating it to the exigencies of our human intellects, which become in this theory nothing better than illusions.

Pragmatism, on the other hand, is more dynamic, more human than Absolutism. But it exaggerates the human element in knowledge by making man the sole measure of the universe, and this attitude leads directly to Subjectivism. Pragmatism sacrifices truth in the interests of individual needs. Its metaphysics is both ambiguous and unacceptable, and its epistemology little better than a glorification of personal opinion. Likewise, the place which is given to the human will in the making of truth is out of all proportion to the rôle it actually plays. Both Pragmatism and Absolutism have their good points. The emphasis which Absolutism places upon the intellect in the truth relation is of great value, while the major claim to our recognition on the part of Pragmatism is its insistence on the dynamic character of human truth.

Realism, by steering a middle course between the ex-

aggerations of both Absolutism and Pragmatism, hopes to obviate the difficulties of each of these theories. Realism acknowledges the supremacy of the intellect in the making of truth, although at the same time it does not deny that utility and human needs influence our mental acceptances. For the realist neither coherence nor utility is an adequate, or better, an ultimate criterion of truth. He accepts a truth because it is objectively evident, because it truly represents what exists outside the mind. Unless we accept this criterion as our guide, it is impossible to arrive at any truth. To know secondary principles is not enough for the simple reason that unless we can know with certainty the first principles of the ideal order, which form the basis of and enter into every form of knowledge, we are doomed to utter scepticism. These first principles are implicit in all our judgments, and all our inductions from facts, as well as all our deductive explanations of facts depend upon them. As Coffey concludes, "the real truth-value of all our knowledge, i. e., its value as giving us a genuine insight into reality, depends altogether on whether the intellect, when its assent to such principles is compelled, thereby gets an insight into reality. And this, in turn, depends on whether the compelling factor is *objective evidence, i. e.*, the *reality itself* presented as necessarily representable by intellect through such axiomatic judgments, as having and displaying a *real exigency* for such representation; or whether on the contrary the compelling factor is a subjective influence which, whether conscious or unconscious, has no claim to any *evidential* value, *i. e.*, to any significance as *manifesting reality* to the mind." [1]

[1] Coffey, *Epistemology*, p. 279. Particularly noteworthy is the concluding chapter of Walker's *Theories of Knowledge*, in which it is pointed out that Realism, when correctly understood, may well claim to be a higher synthesis of both Absolutism and Pragmatism, since it sums up in itself what is true and significant in both theories, while discarding what is false.

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CHAPTER VIII

THE PROBLEM OF FREEDOM

The problem of freedom, although generally discussed in relation to the human will, borders closely on the ultimate problems of both metaphysics and psychology. As a psychological question, it has to do with the genesis and nature of the ability of the individual to choose between conflicting motives, which choice determines how he shall act in any given case. From the point of view of metaphysics, freedom is bound up with the wider question of indeterminism versus determinism as an explanation of the universe as a whole. It, therefore, transcends the limits of a purely ethical or psychological theory and has its roots deep down in a general philosophy of the cosmos.

It is possible to treat of particular ethical questions without raising problems in metaphysics. One cannot, however, probe the depths of morality without coming face to face with the fundamental aspects of ultimate reality. Our attitude towards reality as a whole will determine what our morality shall be. The foundations of every ethics are metaphysical. If we are determinists, there can be no place in our philosophy for freedom. If, on the other hand, we do not view the universe as a closed system in which the reign of mechanical law is held to be supreme, we are indeterminists, and shall most certainly concede to the human will a proper measure of freedom.[1]

Our conceptions of morality, therefore, are determined by the view we take of nature as a whole. Moreover, our

[1] Rashdall, *The Theory of Good and Evil*, Vol. II, pp. 189 et seq.

theories of the self and of its place in the universe, together with our theory of the nature and validity of knowledge, influence the view of human freedom and of morality which we defend. If the self cannot be a *vera causa*, and cannot control its actions, there is an end of free will. Moral consciousness is a fact which requires both interpretation and explanation. The way we regard its deliverances will, in a large measure, depend on the fundamental metaphysical and psychological postulates which we accept.

For these reasons, no statement or discussion of the problem of free will would be adequate which failed to take into account the wider aspects of the freedom problem. We must, therefore, determine beforehand whether metaphysically we are to accept or reject the position of Determinism. A full analysis and answer to that problem is the proper function of metaphysics. Here, however, we shall but briefly state the position and our criticism of it. Then we shall pass on to the special problem of this chapter, that of freedom of the will.

Determinism.—*Determinism* has very close connections with Mechanism for the reason that all mechanists, explaining the universe solely in terms of mechanical law, necessarily conclude to the universality and all-inclusiveness of their principles, from which no act, whether of nature or of man, can be excepted. Indeterminists, as a rule, follow the philosophy of Vitalism, though it must be acknowledged that the history of philosophy gives us numerous examples of thinkers who were teleologists and, at the same time, advocates of moral determinism. Vitalists do not deny that the law of causality holds good for natural phenomena. Moral actions, however, they believe to be caused by the Self and, therefore, are not conditioned exclusively by the causes which operate in the material universe. As moral

acts they are outside the world process, which is subject, from every point of view, to the causal law. Determinism, however, acknowledges no such exceptions to the universal validity of causation. The laws of nature have been laid down and each and every part of nature is determined in its operations by these laws. This holds good both for the events of the physical world and the events of man's mental and moral life.[1] Every event has its origin in a previous event and is determined by that event, of which it is a necessary sequence. When the determinist philosophy is applied to human acts, it means that all our actions are the necessary result of the nature of the individual. Choice plays no part in these acts, which are causally conditioned in much the same way as the functions of matter. "One's character and environment are regarded, by the determinist, as the product of conditioning forces which reach back in an unending chain of succession. This position also means that if we had a full knowledge of the antecedents of any act, as in practice of course we cannot have, we should understand the act, and should see why the act is just what it is. Nothing in conduct would then appear blind or a matter of chance." [2]

Now, the principle of causality which holds that every event must be preceded by another event which it succeeds according to a specific law, is of course a purely phenomenal

[1] Rashdall, *The Theory of Good and Evil*, Vol. II, p. 201, puts the position thus: "No Causality is recognized in the Universe except the necessary connexion of thought between phenomenal antecedent and phenomenal consequent. . . . The actions which the individual self knows are not in any case whatever the events which it causes, but just the events which it cannot help. If Causality is recognized at all in regard to human actions, it is recognized only in the same sense in which Causality is recognized between one natural event and another. The fact that the antecedents of human action are facts of consciousness makes no difference to their essential character. We have a 'psychological mechanism' instead of a physical mechanism; that is the only difference. It is not the self (individual or universal) that is the cause of action, but an event in consciousness which is the cause of other events in consciousness."

[2] Everett, *Moral Values*, p. 336.

construction of causality. From this uniform succession of antecedents and consequents, a synthesis is made which, taking into consideration both the time and space categories, concludes to a series of successions which must form what Fouillée calls a "système de simultanéités." [1] Each event is influenced by its predecessor and, in its turn, influences its successor. This is what Kant speaks of as the law of phenomenal causality. From a mechanical explanation of a part of reality, the law is transferred to all reality. Mathematical and physical determinism is looked upon, therefore, as but the outer aspect of an interior or intellectual Determinism.

The ancients did not debate the problem of free will. Their ethics revolved rather about the question of good and evil. Destiny, even fatalism, took the place of Determinism in Greek and Roman philosophy. The problem of free will is a contribution of Christianity to the world of thought. For theological reasons, Christian thinkers were the advocates and defenders of free will. Very early, however, in the history of Christian thought, efforts were made to put the theological doctrine on a purely philosophical basis.

In modern thought the importance of the problem has grown rather than decreased. [2] Spinoza was an out-and-out determinist,[3] and his philosophy of the will has found adherents in every form of modern Idealism. The denial of individual freedom is a necessary conclusion of Idealism, no matter under what guise Idealism presents itself. For if the principle of the universe is an unconscious force, we

[1] Fouillée, *La Liberté et Le Déterminisme*, p. 183.

[2] This statement does not coincide with that of Paulsen: "Modern philosophy, which is an outgrowth of the new natural sciences, has not, it is true, solved the problem; it has simply dropped it." (*A System of Ethics*, p. 455.) Recent philosophical literature, in our opinion, does not bear out the contention of Paulsen. Monists would like to see the question dropped, but unfortunately for their system, it keeps bobbing up constantly to plague them.

[3] *Ethics*, Part II, prop. 35.

cannot but conclude that it manifests itself without any regard for individual liberty. Contrary to the well-known fundamental moral purposes which actuated Kant, his philosophy represents a determinist conception of moral consciousness which has done more than any other theory to impose on modern thought a false idea of freedom. Deeply influenced by the Empiricism of Hume and Locke on the one hand and the Rationalism of Wolff on the other, Kant found himself face to face with two divergent currents of thought, both of which ended in a denial of free will. He, therefore, became a determinist, although he afterwards straddled the problem in his *Critique of Practical Reason* by granting that the will is free. The Kantian freedom is based on the moral law which of itself implies freedom.

Materialism is essentially deterministic. Idealism has arrived, by a different route, at the same conclusion. The determinism of Empiricism is mechanical; that of Idealism, a logical determinism. In the last analysis all phenomena, whether physical or mental, are determined causally, both for the materialist and the idealist, in which case freedom of every kind is done away with.[1]

The determinist tradition has been very strong in English philosophy. Beginning with Hobbes, such thinkers as Locke, Hume, and John Stuart Mill, have upheld successively the necessitarian position. No little impetus has been given to the spread of determinist ideas by the wide acceptance of voluntarism and the increasing hold which mechanistic science has had upon men of science. Within recent years, however, there is manifest a decided tendency to tone down the grim and remorseless conclusions inherent in necessitarianism and to acknowledge that moral obligation and the development of morality, both individual and social,

[1] Naville, *Le Libre Arbitre*, p. 232.

are ideals not altogether unworthy of effort on our part. Just as contemporary Materialism has thrown overboard many of the radical principles and conclusions of its nineteenth century predecessor, so present-day moral determinism, repudiates in theory and practice the absurdities of fatalism and attempts, vainly we think, to harmonize its beliefs with the moral aspirations of mankind.[1]

Criticism of Determinism.—Determinism as metaphysics involves a conception of the universe which is not acceptable on many counts. The difficulties inherent in Mechanism, whether pure or modified, have already been pointed out.[2] Many modern scientists and philosophers are ready to-day to admit a certain amount of freedom in the realm of physical science from which, up to this, it has been most rigorously banished. As early as 1874, Boutroux in his *De la Contingence des Lois de la Nature*, pointed out that no physical law is absolutely precise. Physical law expresses merely a quantitative approximation, more or less exact, between phenomena. It can never hope to be a perfect expression of fact as it really exists, for back of quantity lies quality, and over and above the phenomenon there is always substance to be considered. Boutroux discovered contingency in individual cases and, from these, reasons to the general law. Realists would come to much the same conclusion, but from another starting point. Leaving to one side the question of which method is right, the fact remains that many modern mathematicians are indeterminists and that the postulate of universal validity, as far as it is ap-

[1] The student who wishes to trace the history of English Determinism, as well as to read a fair but exacting criticism and evaluation of this most important movement, should procure Rickaby, *Free Will and Four English Philosophers*.

For a complete history of the problem, see George L. Fonsegrive, *Essai sur le Libre Arbitre*, pp. 1–305; Piat, *La Liberté*, Première Partie, pp. 13–35, confines his history to the nineteenth century.

[2] See supra, Chapter V.

plicable to natural law, does not receive general support to-day.[1]

Renouvier, the founder of Neo-Criticism in France, has done much to discredit Determinism in scientific circles. Fouillée, in his *La Liberté et le Determinisme*, takes as his thesis that Determinism and Indeterminism are equally false, and endeavors to arrive at a higher synthesis by pointing out that the idea of liberty, because of its inherent power, must eventually realize itself and become true. Bergson has emphasized the profound life of the Ego, and from the psychological point of view, arrived at practically the same conclusions as Boutroux and Renouvier.[2]

One of the most important by-products of Determinism has been to deny the very existence, or, at least, the utility for modern science and philosophy of the category of finality. Final causes have been relegated to the storeroom of antiquated philosophical trappings, and in their place efficient causes now reign supreme. But, as we have already pointed out,[3] this practice of modern philosophy is not justifiable. There still remains a place for final causes in a critical philosophy if we would understand reality. For what is a final cause, in the last analysis? It is an idea, an abstract representation of a purpose to be attained. Purpose is essentially qualitative, and, as such, differs radically from motion, which is essentially quantitative. Every motion may become a motive. Nothing more is required than that the intellect abstract from the limiting concrete conditions under which motion can exist. Motive, therefore, is wider than motion. It approaches infinity; in fact, it surpasses

[1] Fonsegrive, *Essai sur le Libre Arbitre*, pp. 284 et seq.

[2] See Fonsegrive, *Essai sur le Libre Arbitre*, pp. 560 et seq. on the "Philosophie de la Contingence."

[3] See supra, p. 131.

infinity. For the ideas of justice, goodness, duty, virtue know no limits.[1]

Determinism reduces everything in the universe to motions, the relations between which are fixed and the quantity of which cannot be increased or decreased. But, as we remarked before, it is not true that motion is an all-sufficient explanation of reality, including thought. To conceive of thought as only a special kind of movement is to think an absurdity. Thought in no way resembles any physical phenomenon, least of all does it resemble physiological actions like the circulation of the blood or digestion. Consciousness presents itself to us an indivisible whole, and in its operations it manifests the same indivisibility. Now, movement supposes something which passes from one point in space to another point. Consciousness, on the other hand, is an immanent function and, therefore, in no intelligible sense of the word, a movement. Each function of consciousness, sensation, judgment, the emotions, willing are simple and by that very fact, irreducible to physical movement. That acts of consciousness are always paralleled by physiological functions does not argue to a fundamental identity of these radically different phenomena. Neither do the discoveries in the field of psycho-physics, as for example, the Weber-Fechner Law, nor those of reaction time point to an identification of the physiological with the psychological. On the contrary, psycho-physics confirms us in our view that mental processes are radically different from every known kind of physical motion.[2]

Must we then conclude that a different series of laws holds good for the mental than for the physical world? To which

[1] See Piat, *La Liberté*, Deuxième Partie, pp. 131–188, for a thorough discussion of the philosophy of final causes; also, Janet, *Final Causes*, trans. Affleck.

[2] See Piat, *La Liberté*, Deuxième Partie, pp. 189–215.

we might reply, what arguments force us to conclude that between facts so diverse as the mental and physical, the same set of laws of necessity must obtain? Neither logic nor fact compels us to the conclusion that the mind does not possess its own laws and its own kind of functions.

Every philosopher respects the desire of the scientist to attain, whenever possible, unity, simplicity, and continuity in all his constructions of nature. He likewise desires to banish chance as an element influencing the workings of natural law. Moreover, it is a laudable scientific ambition to envisage a time when we shall be able to predict with unfailing accuracy the course of every natural event. But the absence of prediction in the realm of mind does not argue to an overthrow of science. Freedom, if it exists, is only demanded by the philosopher for man. In the remainder of nature philosophy may concede to science an undisputed and unchallenged sway of blind law, provided the facts of nature demand and warrant such a position.

That the self can be a true cause follows logically from a correct conception of the nature of the self. The Ego is something real, just as real as matter or motion. It possesses both unity and continuity, otherwise the manifold impressions of our daily life could never be built up into a single world. The acknowledgment of the existence of a self lies at the basis of all morality. And not only does the self exist, but it is a cause. This point shall be brought out somewhat in detail later on in this chapter.

Determinism reads out of the universe ideas and ideals whose value is not only primary for our individual lives, but upon the absolute truth of which all civilization depends. Every doctrine of metaphysical necessity is fatal to all our conceptions of duty, merit, punishment, and value. That the individual self is a cause, and that certain actions must be attributed to this self; that, moreover, some actions

are good and some bad, are primary postulates of all Ethics. These propositions may be illusions, or may be valid only on a certain plane of thought. At the present moment these statements need not be discussed. But that they are vital to morality and must mean something, every one will acknowledge who appreciates what the word "ought" entails in every rational scheme of morality. Morality is a datum of consciousness—of this fact there can be no dispute. Nor can we deny this if we are prepared to accept any of the deliverances of consciousness.

Now, morality implies duty, merit, value. Determinism would do away with all this, and would therefore not only leave both mankind and the world poorer by doing so, but would distort human life beyond recognition. A morality which would be more than an aspiration cannot flow from material causes, nor exist in material things. As Rashdall so well remarks, "For the man who regards all spiritual life as a mere inexplicable incident in the career of a world which is essentially material and as a whole essentially purposeless, there is no conclusive reason why all moral ideas—the very conception of 'value,' the very notion that one thing is intrinsically better than another, the very conviction that there is something which a man ought to do—may not be merely some strange illusion due to the unaccountable freaks of a mindless process or to the exigencies of natural selection." [1]

The Meaning of Free Will.—A great deal of confusion has been caused by the use of the word "freedom" in many

[1] *The Theory of Good and Evil*, Vol. II, p. 210.

The efforts of some determinist moralists who attempt to show that Determinism is consistent with freedom, or that if responsibility and punishment are reinterpreted in a determinist sense they acquire a higher value for Ethics than the same ideas as understood by indeterminists, strikes one as a pure dialectical *tour de force*, or as an unworthy exit from the fatalistic consequences which logically follow upon every thoroughgoing system of moral determinism.

and often opposing senses. The word "Determinism" has also suffered in much the same way, so that to-day many thinkers call themselves determinists, in contrast to the indeterminist who refuses to accept any sort of determination whatsoever where acts of the will are concerned. Many determinists, however, repudiate altogether the claims of metaphysical mechanism in the field of human act, and concede to the will the power of self-determination. Their determinism, therefore, is a "self-determinism." As we shall see presently, this sort of Determinism is quite capable of being defended and need not clash with the idea of human freedom.

The plain man believes himself to be free. He considers many, if not the vast majority of his acts, to be the products of free will, and therefore indetermined by any causes either within his own nature or in the universe at large. Some of his acts are good and some bad, but from his past no one can predict how he shall act in the future. His present character or nature, although it may deeply influence many of his actions, does not determine them to the extent that one who knew his character thoroughly would be able to predict how he should act in any given case.

We believe the plain man to be right, at least in principle. A critical examination of these beliefs may not justify him to the extent to which he is committed to them, neither would it necessarily favor his peculiar theory of freedom. At bottom, however, he is correct when he asserts that the will is free.

Freedom in general is absence from restraint. Restraint may be either external or internal. If there be no external restraint, the thing is free. Thus, for example, we would say that a river flows freely if no one constructs a dam to interfere with its normal flow. An animal is free if it be permitted to follow its natural desires. There is no ques-

tion of this kind of freedom where the will is concerned. Both determinist and indeterminist readily admit that man is physically free.

Again, a being is said to be free when it is not constrained by any internal force. Such is the freedom of the human will which is capable of determining its own actions. But we must be careful to distinguish between free acts and acts of the will which, although proceeding from an internal principle with an apprehension of the end to be attained, cannot be said to be free. Such are all our spontaneous or instinctive reactions. On the other hand, there are acts which proceed from the will but only after we have deliberated upon an end which we have perceived and which we are conscious of to the extent that we prefer this rather than another course of action. This is human freedom in the strictest sense of the word. In this sense, freedom may and does imply that we act in obedience to reason, in which case only good acts are free. This, however, is a metaphysical use of the word and should be rigidly excluded from our argument.

Freedom, in the narrow sense, means that our acts proceed from the self which is not determined in its choice by any mechanical law. Freedom is self-determination. It does not involve, as we shall point out, the idea of chance, neither does it signify that our acts have no antecedent causes of any kind which may determine their course.

Liberty may remain even though it be determined by something, if that something be the self. Freedom, therefore, is not causeless. What libertarians wish to assert is that the cause of some of the phenomena of will is not to be found in any preceding phenomenon, but only in the freedom with which the will itself is endowed. This distinction is of vital significance for it clearly differentiates our position from that of mechanical necessarianism, which looks

upon all actions as caused by other physical actions which precede them. If these meanings were always clearly held, little or no confusion would result from the use of the terms Determinism and Indeterminism. Unfortunately such has not been the case, with the result that on few questions is there so much misunderstanding. However, at bottom, the controversy is not one of words, and if one holds the will to be free, in the sense pointed out, it makes little or no difference what name he gives to his philosophy.

Rational man alone is free.[1] There is no freedom where sensation solely is concerned. Unless man were able to choose between motives presented to his mind, there could be no question of liberty, which necessarily implies a measuring of the values of the ends presented to consciousness. Now, it is impossible to measure the value of a thing unless we can know its essence, and essences escape us except by reasoning upon what is presented to the mind. Liberty, therefore, would be a farce if man did not possess the power of reason. For, as Piat remarks, "to will freely is to choose; but no one can choose what he does not know and he can choose only in the proportion in which he does know." [2]

Again, freedom is not motiveless willing. No rational action is possible unless it is inspired by a motive. The free-willist, however, denies that this motive must be confused with something either in a man's environment or his character. Motives are presented to reason, and reason chooses *not without* but *between* motives. If only one motive should be presented, the consequent act would not be free.

Neither do we deny that man, in his choices, follows the

[1] "Pour trouver la liberté, ce n'est ni le fer doux ni l'amibe qu'il faut observer, mais soi-même et dans soi-même, ce n'est pas l'animal qu'il faut voir, mais l'homme, je veux dire cette partie supérieure de notre nature qui dépasse le monde des images, ou s'épanouit l'idée. La seulement apparait et s'exerce cette puissance d'un ordre à part qui s'appelle la liberté."—Piat, *La Liberté*, Deuxième Partie, p. 32.

[2] Piat, *La Liberté*, Deuxième Partie, p. 14.

"strongest motive." The very fact that he acts on a motive makes the particular motive, as far as the individual goes, the strongest. But whether this motive is strongest in any other than a relative sense, we have no criterion for determining. Granted that we always act according to the strongest motive, what is it that makes a particular motive the strongest? If it is not man's character, nor the mechanical laws of nature, but his inherent power to determine for himself the strength of motives, then such an objection proves nothing at all against the doctrine of freedom of the will.

It is a pure travesty of the indeterminist position to speak as if he believed that willing is a causeless act. Thus, Everett [1] asserts "that a choice which has no ground, no determining motive, cannot be a reasonable choice"; a statement with which all, even the indeterminist, will agree. But such is not the position of those who believe in freedom. On the contrary, there is a ground, a cause for our choices, namely, the self, which, because of its possession of the power of reason, is endowed with the faculty of choice. Nor does this view necessitate our looking upon the will as "a kind of special dynamo, held in reserve, to be used only on occasion." [2] The will is one of the many faculties of man. It is in no sense of the word a distinct independent entity, entirely uninfluenced by sensation, feeling, or thought.

Determinism, in order to deny all self-determining activity to the Ego, is compelled by sheer logic to unite efficient and final causality, or better, to reduce all finality to the status of efficient causes.[3] But, from our point of view, it is an error to attempt to express physical and psychological causation in the same terms, for the way an Ego causes

[1] *Moral Values*, p. 348.
[2] Everett, *Moral Values*, p. 353.
[3] See Everett, *Moral Values*, p. 351, on the unity of efficient and final causation.

something is not at all the same as the way in which mechanical causation occurs. "The Self is not an event or a series of events." [1] Neither are motives, feelings, nor any other psychical influence distinct and apart from the Self. On the contrary, they could not exist except for the Self which makes them what they are.

Another aspect of causality must be kept in mind when discussing free-will. The will is self-moved; it is the cause of its own acts. This does not mean that it is a "causeless cause," or that it has its nature from itself. At this point, it seems necessary to admit quite frankly that freedom, in any intelligible meaning of the word, postulates the existence of a First Cause, God. But there is nothing in the idea of a First Cause which would require a toning down of our thesis which accepts self-determination on the part of the human will, nor of the fact of our responsibility for acts thus freely willed. We most stoutly affirm that the will cannot have any phenomenal cause outside itself which determines all its acts. At the same time, we cannot deny that our wills depend on God, the source of all life and energy, from whom the will, like everything else, derives its nature and its power to act. Such an admission brings us face to face with certain theological aspects of the problem of free will.

But what the relations of the First Cause to any secondary cause are is without the scope of this argument. For the present, therefore, admitting the necessity of postulating the existence of a First Cause for an intelligent and complete understanding of human activity, we simply affirm the Self to be the cause of its acts according to the laws of its nature laid down from the beginning.

A great deal of the prejudice against free will current in scientific circles is due to the belief that indeterminists claim

[1] Rashdall, *The Theory of Good and Evil*, Vol. II, p. 326.

for free will a range of freedom which is incompatible with the facts of life as we know them. Now, some indeterminists, and the plain man may exaggerate the extent to which we are free. The philosopher, however, is quite frank in acknowledging that relatively few of our daily acts are free in the strict sense of the word. Neither does he fail to recognize the large rôle which motive determined often by heredity, character, habits, or environment plays in the acts of every man. Again, it is quite possible to predict with accuracy what a given number of individuals will do under ordinary circumstances. For example, we can safely say that if something to drink is presented to a dozen thirsty men all will drink. It is also true that if we had a perfect knowledge of all the factors, hereditary and environmental, which operate on the individual, we would be able to predict, with a certain amount of accuracy, precisely what his reactions would be to any given stimulus.

Yet, in spite of the influences which from every quarter bear in upon us, are there not some acts which man freely performs, which no necessity forces upon him, for which there is no "must" but simply a "will"? The problem reduced to its ultimate elements is something like this—granting all possible limitations on the action of the will is man not able, in spite of these influences, to determine which motive presented to his mind is strongest and thus to determine actively what course of action he shall pursue? Or, to put the question in another way—is every act which we perform to be referred completely to such determining causes as heredity and environment, or are there not acts which, admitting these influences, cannot be explained without postulating another and entirely new fact, namely, man's power to choose freely? To the question stated in some such way, the advocate of free will answers in the affirmative.

Arguments in Favor of Free Will.—The arguments ordinarily advanced by those who accept the freedom of the will may be classified under three principal headings. These arguments are drawn from psychology, ethics, and metaphysics. Taken singly they may not appear to be altogether convincing. If viewed as one argument their cumulative force is such that no doubt can possibly remain as to what our attitude must be in regard to the doctrine of freedom of the human will.

If freedom is a fact, we should be able to find experimental proof of its existence. Liberty is not merely an academic thesis to be proved by a priori reasoning. Men, we claim, are free. What then are the indications or signs which prove that they act freely?

In the first place, it is a quite universal conviction of mankind that it is possible for the will to choose freely. Nor do we get rid of this fact, attested so plainly by consciousness, by calling it an illusion. A survey of the different acts of consciousness demonstrates that my actions are not due to ignorance, nor to any lack of knowledge of the causes which are operative in my choice. On the contrary, I know with certainty that the Self is the cause of these processes. Some of my actions are not free. These are readily distinguished from acts which I know to have been free. It may well be that in any given instance I do not analyze thoroughly the different motives which are presented to me. In spite of the lack of analysis, I am positively sure that in making a decision the act proceeded from me, and not from causes over which I have no control. Let us suppose, for the sake of argument, that our sense of freedom is an illusion. In this case, our consciousness of freedom would be in inverse proportion to the knowledge of the motives which prompted our acts. An analysis of consciousness, however, proves that when I have the least knowledge

of the motives which prompted my choice, it is then that I regard my acts as more or less irresponsible and do not look upon them as free.

The belief of every man, whether plain or philosopher, in the fact of human freedom is borne out by an introspective analysis of the various elements discoverable in our daily volitions. The process of voluntary attention, for example, gives a concrete and unmistakable expression of freedom in mental activity. Not only may I refuse to pay attention to any object of thought which is presented to my mind, but if I do decide to attend, my mind has the power to select out those particular elements which I wish to concentrate upon. These elements may not be the most appealing to me personally, nor need they possess the greatest intellectual cogency. However, it is the particular aspect of the thought-object which I wish to consider, and who will deny that I may, in spite of any attraction in the opposite direction, concentrate on that aspect in preference to every other? Now, if this be not freedom, in what more explicit way could consciousness manifest to me the fact of my freedom? [1]

Again, the very act of deliberation implies freedom. Suppose, for example, that it is possible for me to select one out of many ways of doing a thing. Before the many possibilities I hesitate. I begin to evaluate the different courses presented to me. I decide to act on one possibility, or, better, I decide to defer my decision until a later time. Now, if I were determined to a course of action by my own character or nature, the aforesaid act of deliberation would be impossible. Such a conclusion is revolting to the common sense of every man. Nor is my deliberation due to ignorance of the causes which are operating on me. I know

[1] Piat, *La Liberté*, Deuxième Partie, p. 253; Fonsegrive, *Essai sur le Libre Arbitre*, pp. 396–421; Naville, *Le Libre Arbitre*, pp. 110 et seq.

that I control the course of my deliberations. The proof of this last statement arises from a consideration of the many times when I vacillated between conflicting courses of action, or followed a course which was imposed upon me for one reason or another.

Hesitation is not deliberation (a fact which many determinists ignore) for in the latter case I actively choose to do a thing because the reasons submitted to my mind are of such a character that I judge them to be sufficient justification for proceeding as I do. "This important fact," as Maher remarks, "is constantly overlooked in attacks on the argument from introspection. Were I free in *all* my actions perhaps my knowledge of moral freedom would not be so clear. Were a man *always* hungry his conception of hunger would be imperfect. I have learned what *free, self-determined*, conative activity is by having been repeatedly the subject of conative activity which was *not* free or determined by myself, but the *spontaneous* and *necessary* outcome of *my character and the motives* playing upon me." [1]

Not only am I free to attend and to deliberate, but I also freely decide what I desire to do. If my act is good, reason approves; if it is evil, shame and remorse follow upon the commission of the act. Now, I know from introspection that I have elected freely to do the thing which was done, and that it was possible for me to do otherwise. It is sheer nonsense to say that the decision was the result of my character, and not of the Self. Even the determinist acknowledges that I may change the course of my life by changing the inclinations of my character. But in this very act of decision, is there not a surreptitious introduction of the idea of freedom into a context where everything is supposed to be determined? To our way of looking at the question, the only safe course for every thoroughgoing philosophy

[1] *Psychology*, p. 409.

of determinism is to deny outright the claim of the individual, based on the data of consciousness, to be able to decide upon one or another course of action.

In all probability the most significant psychological testimony to the freedom of the will is the fact that we often do, in spite of the strongest temptation to the contrary, persevere in a certain course of action. Every motive for changing my way of acting is present or continually recurs. The pressure to change is at times terrific. No positive act is necessary for me to give in to the temptations which besiege me. All I need do is to stop struggling and follow the line of least resistance. But I struggle on, and in spite of my desires or leanings, actually decide to do good. The whole struggle, and my final decision, are simply inexplicable psychological facts in any determinist philosophy. To contend that never was my decision free, that the whole struggle was an illusion, that it was ordained beforehand how I should act, that my final victory was not a victory at all in any true meaning of the word, is to uphold the incredible. The individual man may be deceived when he says that he is free morally, but if he is deceived, it is only fair to point out that the whole human race is deceived along with him.

The ethical argument favorable to free will is of the utmost importance and cogency. The moral consciousness is a fact no less than the physical universe, which must be interpreted and explained. Now, if it cannot be explained adequately on any other assumption than that the human will is free, we are forced to accept this doctrine. Perhaps our psychology or metaphysics may clash with such an assumption. But if the assumption is justified, and we think that it is, rather than refuse to accept the doctrine of free will, it might be well to revise both our psychology and metaphysics so as to bring them into harmony with the facts

of morality. Likewise, because the belief in free will had its origin in religious thought, and is intimately bound up with certain theological ideas, need not frighten the philosopher who is not imbued with the *odium theologicum.*

That every man possesses the sense of moral obligation seems incontestable. No appeal to history is necessary to prove this fact. Every man, looking into his own conscience, appreciates only too well that there are certain acts which he must perform and others which he must avoid. Nor is this sense of moral obligation a mere generalization from experience or the result of hereditary factors over which we have no control. It is an immediate and intuitive expression of every man as soon as he is capable of distinguishing right from wrong; it is a universal characteristic of every rational being. As Kant puts it: "Thou canst because thou oughtst." The conclusion is self-evident, for if one ought to do a thing, it must be possible for him not to do it. The categorical imperative is senseless unless we suppose that the individual has it within his power to act otherwise.[1] Obligation can have no meaning for ethical determination unless it be reinterpreted in a sense that shall include as obligations actions which were performed as the result of inevitable choices, which were themselves determined.

Intimately bound up with the idea of obligation are the ideas of remorse, repentance, merit, and desert. These moral judgments have both validity and value—the universal use of them by mankind is sufficient proof of that. But why should one be sorry for an act over which he had no control, or manifest repentance for an evil deed which he could not avoid? To question the rationality of remorse is to overthrow all our conceptions of the moral life. It does not add to an intelligent understanding of the universe to claim that the moral and the mechanical are identical. In

[1] Piat, *La Liberté*, Première Partie, pp. 37 et seq.

fact, reason rebels against such a view. The mechanical can be made synonymous with the moral only on the assumption that we suppress all the noteworthy characteristics of the moral which make it what it is. What has been said of remorse, may be repeated of merit. The whole conception of merit is foolish if my acts are but the result of my character, and not free.

Determinists, as a rule, are frank to admit that these meanings have a "genuine moral significance for freedom and responsibility." [1] They explain, however, such moral sentiments as responsibility, punishment, and merit in terms of necessity, and concede to them only a secondary rôle in the making of our moral judgments. Punishment, for example, cannot change the nature of an act already necessitated. It may however bring new motives into action and thus prevent me from doing wrong in the future. But, as we have already remarked, Determinism has discovered in this only a new ethical language or, better, given new meanings to old words consecrated to quite different meanings in the language and literatures of all peoples. That such reinterpretations of our commonly accepted moral emotions and sentiments have been made is no argument for their truth. What the philosopher is interested in is not the manufacture of a new language for ethics, but the elaboration of a theory which harmonizes with facts and with the sentiments of the human race as far as morality goes, and which, based upon facts, explains them in an adequate and acceptable fashion.

Determinism also rejects the value of such judgments as responsibility and justice, at least in the sense in which these terms are commonly understood. And how are these terms generally understood? In the first place, I feel myself accountable for all my acts, of which I am conscious at the

[1] Everett, *Mental Values*, p. 370.

time of doing them, and to whose moral quality I had adverted. Not only are the acts judged good or bad, but I judge that I, the author of these acts, am responsible for their goodness or badness. This sense of personal responsibility receives moral emphasis from the fact that, if I do an act which is not free, I in no sense feel responsible for it.

Secondly, the idea of justice underlies all our conceptions of right and wrong, and justice means simply that we act according to law. But if all acts are determined by law, there remains no place for those which we call unjust. The whole fabric of our value-judgments, therefore, seems to rest upon a belief in the freedom of the will. So true is this that human freedom is undoubtedly a necessary postulate for the continued existence of social life itself. For social life is inconceivable unless a certain minimum of right living is generally accepted and lived up to by all. Character, nurture, patriotism, are but aids to the sense of moral obligation. They are, in no sense of the word, an adequate substitute for moral responsibility and obligation. Evil is not a theory; it is a fact, and a very unhappy one. Its suppression, both in the individual and in society, depends more upon a vigorous development of the sense of individual responsibility than upon any other single factor. If society is to endure, it can only do so if it will frankly and openly acknowledge that man is free, that not in the laws of nature, but in his own sense of freedom and individual accountability rests the future both of the individual and of the social organism as well.[1]

The philosophical argument favorable to free will centers about the nature of the human will which is a rational appetite. The will is drawn towards that which is agreeable, namely, the good. The good is its proper object. But only the perfect good under every possible aspect possesses within

[1] Maher, *Psychology*, pp. 398–406; Naville, *Le Libre Arbitre*, pp. 106–146.

itself the power to force the will to accept it. Supposing, however, that our apprehension of the good is limited because of the natural limitations of man's faculties, it follows that the will is not drawn irresistibly to any perceptible good. In other words, man acts or refuses to act on the basis of his conception of the desirability of the good which is presented to his mind. In our present existence, since no good is perceived which can command at all times his total adherence, there remains the possibility of selecting that good which seems to him to contain the greatest possibilities for his happiness. Freedom, therefore, is the natural result of the possession of a faculty capable of apprehending the universal good, but which, because of its natural limitations, must judge for itself, amid the manifold kinds of goods presented, which particular one is most desirable. Man's judgment, of course, is often erroneous. That very fact proves that he is not determined by forces outside himself to the acceptance of a necessitated line of action.[1]

To the student it may seem strange that the will is indetermined, but this is no stranger than that the intellect can think different thoughts. Both acts are, in the last analysis, the acts of two faculties whose peculiar nature is to act in that special fashion. If the mind were like a furnished room containing pieces of furniture, it would indeed be difficult to see how any changes could take place from day to day. But the mind is not distinct from its states in the sense that they are two different things. The mind and its states are one. It is the mind which is indetermined, and which freely determines what states shall exist.

Criticism of the Doctrine of Free Will.—In outlining the meaning of freedom as we understand and defend it, many

[1] Fonsegrive, *Essai sur Le Libre Arbitre*, pp. 435–452.

of the objections ordinarily leveled against this doctrine have been exposed and answered. Here, therefore, we shall confine our attention to those difficulties which have not been answered above, and which seem to possess more than a passing significance.[1]

One of the principal difficulties brought against Free Will is that from physiology, which affirms that every psychological act is conditioned by a previous change in the physical organism. All our mental acts are so determined by preceding or concurrent physiological functions that in no intelligible sense of the word can they be held to be indetermined. To which we might reply, that no psychologist questions the dependence of the mental upon bodily function. However, we cannot agree with the statement that the dependence is so close that bodily function determines and conditions absolutely every mental process. Eminent physiologists likewise agree with this point of view, and as strong a case can be made out by them for the conditioning of the bodily by the mental as vice versa. In the present state of our knowledge it may be asserted confidently that physiology has not discovered a single fact which militates against the belief in freedom.[2]

The psychological argument brought against freedom may be stated briefly in the following manner. There is no such act as motiveless willing known to psychology. We

[1] The student who wishes to acquaint himself with all the objections should read Naville, *Le Libre Arbitre*, pp. 146 et seq., chapter "Objections à la Liberté."

[2] Naville makes the distinction between the "période *directrice* et la période *executive*" in our acts and points out that only in the first case is there any such thing as freedom. "Vous formez," he writes, "la résolution d'executer un mouvement; cette résolution se traduit par un phénomène materiel primitif dans votre organisme cerebral. A dater de ce moment, tout dans votre corps se passe selon des lois absolument fixes. Le mécanicien d'une locomotive la dirige sur la voie dans un sens ou dans l'autre. A partir de son acte de *direction*, sa volonte n'a plus aucune influence sur *l'exécution* qui résulte uniquement de l'organisation de la machine et des lois de la mécanique. Il en est de même des rapports de la volonte avec le corps." (*Le Libre Arbitre*, p. 147.)

act because we are moved to do so by something within us. This something is the result of either heredity or education. Each new scientific investigation of the will brings out more clearly the fact that the will is influenced by many motives, but none of these is free.

No one can deny that the act of volition is complex, oftentimes extraordinarily so. While admitting this fact, it is necessary to point out that there remains a very real distinction, which this difficulty fails to take into account, between motives and the choice itself. Motives there must be before there can be any choice, but the two are not to be confused. The internal experience of each man proves beyond cavil that such a distinction is real, and that even in the presence of the strongest motive one may still choose and elect to do otherwise.

Another difficulty arises from the fact that very often, knowing another man's character, habits, and the environment in which he lives, we are able to predict what he shall do under certain given circumstances. To which we might reply that such predictions are likely to be true in the majority of cases of the actions of any man, but not in all. Liberty we must remember is essentially relative. However, it is real and defies anything like an exact scientific prediction as to what will be done under every circumstance. Again, our predictions are confined generally to merely external acts, the majority of which every one acknowledges to be determined. Unless they take in the field of internal acts, our prophecies are as often as not false. Finally, no libertarian denies the effect of heredity, environment, and education upon the formation of habits. Given a minute knowledge of these in any case, a fairly accurate estimate of the way a man will *ordinarily* act can be made. But such an estimate is not, and cannot be, as we know from experience, infallible.

The scientific advances made in the study of morality and of society during the last half century have occasioned for some a formidable difficulty against human freedom. Social statistics, we are told, prove that a large number of acts, formerly considered free, are now looked upon as determined. Morality is much more dependent upon climate, culture, social institutions, and other non-individual factors than we would have acknowledged before the rise of modern sociology. Statistics prove beyond a doubt that the number of suicides, for example, rises and falls in any given social ambient altogether independent of freedom of the will. In defense of this position determinists cite long lists of statistics which are invoked to show that crime is not so much an individual thing as it is the product of the general conditions existing in society itself. To which objection many possible answers may be given. Firstly, one must not be deceived by the superficial scientific character which statistics possess. Figures do not lie, but always supposing that the figures are correct. In no field, perhaps, is it more difficult to obtain accurate figures than in that of the social sciences, and in no field have figures been more abused. Even accepting the data ordinarily given as exact, what do these statistics prove? Nothing more than that groups of men, not individuals, act in a certain uniform way. Such uniformity is no argument against the freedom of the individual. It is simply a conclusion from our knowledge of the facts which, in the majority of cases, determine the actions of the majority of men. Even the most extreme defender of freedom quite willingly acknowledges that many of our acts are determined. He is likewise ready to admit the influence of both character and education upon the course of a man's life. Such admissions, however, are a long distance from the acceptance of the thesis of Determinism that each and every act of man is inexorably de-

termined by conditions over which he can have no control.[1]

The most serious difficulty, for the modern mind, involved in the doctrine of freedom arises from the conception of the cosmos which holds sway in scientific circles, a conception which maintains that everything in this universe is determined, even the acts of the human will. The scientist sees no reason for making an exception of human acts. Any exception to the uniformity of nature's laws offends against his ideas of simplicity and continuity. There is no place for chance in a reasonable universe, and free acts are merely the result of chance. If human acts have a beginning, then they cannot be accounted for on any other basis than that they are the outcomes of something already in existence before that beginning. New beginnings in an ordered world are inconceivable.

To this difficulty many answers may be given. Perhaps it will be sufficient to point out that the causal explanation must be limited even in the realms of pure science. Time, space, matter set limits to causality. Why, we ask, cannot the same be said of intellect, will, the self, human personality? Certainly, mind is as elemental as matter, and why should not its fundamental qualities be as good a criterion for our judging the applicability of causality as the elementary qualities of matter? Again, human action is not "chance" action. It is the result of the operation of the self which is the final and determining factor in all acts of volition. Of course, if the self cannot be a *vera causa* then we are compelled to reject a priori the possibility of freedom. But if the self may weigh, evaluate, choose, and decide, and it is our contention that it can, then it is a pure travesty of the nature of voluntary actions to describe them as without

[1] Fonsegrive, *Essai sur le Libre Arbitre*, pp. 311 et seq.; also Naville, *Le Libre Arbitre*, pp. 177–188.

a beginning. They begin in the Self, whose proper nature is to initiate acts just as it is the proper nature of the intellect to think, or of a stone to fall to the ground when thrown in the air. And from where does the Self obtain this faculty of initiation? From the same source that the laws of nature emanate—God.

That Free Will is a doctrine which can be maintained, and by abundant proofs, is the conclusion which we draw from the above examination of the claims of Determinism and Indeterminism. It is our belief that Determinism has not proved its case in the field of human activity. Both conscience and reason point to freedom of the will and, in this, philosophy agrees with the viewpoint of the plain man, who also believes in freedom. Common sense, it may be, exaggerates the freedom of our acts, while minimizing the freedom element in our evaluation of motives. In this it is probably wrong. However, at bottom, the philosopher agrees with the man in the street that we are free, and for human life this is the fundamental thing.

No thinker, however, can close his eyes to the fact that the doctrine of freedom presents difficulties. These difficulties are many, but are not, we think, irreconcilable with a reasonable and scientific theory of the universe. At any rate, these objections are less formidable than those which may be brought against Determinism. On the side of freedom is the testimony of each man's consciousness, reinforced by the fact that he lives and acts as if not only he, but all other men, were free. Against this universal belief and fact stands a theory which looks upon the universe as purely material, and reduces all manifestations of activity perceptible therein to different degrees of motion. Particularly, it views the central factor of the world, man, as but a part of this huge cosmic machine and interprets, as Leighton points out, "the meaning and destiny of the whole life of the

spirit in the light of an arithmetical average." [1] But this interpretation is "untrue to the meaning of the whole. Not the so-called 'divine average' but the highest and rarest and most excellent that has been lived by men is the key to the meaning of spiritual individuality, of selfhood or personality in man."

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[1] *The Field of Philosophy*, p. 454.

CHAPTER IX

THE PROBLEM OF MORALITY

Morality is a fact which, in any philosophy worthy the name, demands both interpretation and explanation. A clear-cut adequate conception of what morality is, and upon what factors it is based, is as necessary for a well-rounded definition of the universe as is a consistent statement about the reality and nature of being or of thought. Human conduct follows the lines laid down by the commonly accepted standards of right and wrong. "But what is right and what is wrong?" some one may ask. What the average man, as well as the thinker, wishes to know is, whether there exists a safe criterion by which we can evaluate our actions, and if there is such a standard, how does it define the good, the end which we strive to attain in all our acts.

Morality is as necessary for the reasoned, continued existence of the universe as are the laws of physics, chemistry, biology, and psychology. Mankind cannot exist without morality. It is, therefore, not strange that, from the very beginnings of human thought, philosophers have made more or less successful attempts to answer the questions, "What ought a man to do, and why must he do it?"

No one can question the existence of the moral judgment. Its existence, however, implies that we distinguish between our acts and the standards which are set up to judge them by. Human actions are either good or bad. But this judgment necessarily implies both the existence of some common measure by which we discriminate between right

and wrong, as well as the assertion on the part of the mind that a moral imperative exists which commands us to do right and to avoid wrong. Up to this point all philosophers would probably agree. A division takes place, however, when we ask them to define more clearly what this common standard of morality is, and to point out from what source it receives its justification.

Intimately bound up with the fundamental problem of ethics is that other problem of values. Man is not a mere automaton. His thoughts, emotions, and feelings color all his acts. In the different processes of life he passes judgment both upon his own acts and on things about him. He wishes to know what they are worth, what their value is. And he controls and guides his life on the basis of his estimation of these values. Things have more or less value—this fact seems primary. Now, is this value absolute, in the things themselves, or is it merely relative, that is, only in the I perceiving? Man evaluates, but by what right and upon what basis, is what the inquiring philosopher tries to discover.

The very concepts right and wrong involve reference to an end to be attained. What must be determined, therefore, before everything else is the end for which men act. We must fix beforehand the moral end in order to be able to reach a correct conception of moral righteousness. It is impossible to call an action good unless we have specified previously what goodness is, just as we cannot be certain whether an action is right unless we know the purpose for which it was performed. The determination of the moral end is the central problem of ethics.

To this problem many replies have been given. The ancient Greeks answered it in much the same way as modern philosophers. Christianity, which brought into the world a clearer vision of right and wrong, also established

a more certain basis for morality in its conception of God as the ultimate end and rule of all conduct. The influence of the Christian philosophy of conduct, coupled with the ethical ideas which Christian thinkers have developed and worked out through centuries of speculation and practical application to the needs of humanity, have profoundly affected all Western Civilization, as well as all ethical theorizing. Based on a spiritualistic conception of the universe, Christian thought derives human actions from a spiritual soul as their source, and looks to a spiritual God, the very essence of all goodness, as their end and justification. For Christian ethics, God is an innate necessity. Not only is He the source of all being and of all thought, but He is, as well, the ground and end of all morality. This does not mean that human ethics is a purely arbitrary rule imposed on us by a Being who, because of his infinity, cannot or will not understand our needs and limitations. On the contrary, the basis of morality, as far as we are concerned, is found in human reason itself which is the final arbiter of right and wrong. This basis is proximate and depends, in the last analysis, both for its existence and value, upon the ultimate rule, God; nevertheless, it is for all that a true rule of conduct. Obedience to the rules laid down by reason itself is the test of all right conduct, according to the point of view which we accept and defend.

This ethical philosophy has been known by many names. Some call it Supernaturalism; others, Intuitionism. It must be remarked, however, that the philosophy of Intuitionism is not always explained in the same way by all its defenders. A more understandable, and quite universally used, term for the ethical philosophy which we defend is the Christian philosophy of life, or the Ethics of Reason.

Starting from a materialistic and positivistic psychology, many philosophers advocate what is known as Hedonism.

The essence of this view is that only pleasure counts in conduct. The maximum of pleasure, which an action produces either for the individual or for society, becomes in this thought the standard for all human conduct. Now pleasure may be either of the individual or of society. If the individual's pleasure is made the criterion, we have Egoism. If, however, the greatest pleasure of the greatest number is our rule of conduct, we have the philosophy known commonly as Utilitarianism. Both Hedonism and Utilitarianism have taken many forms, depending on the metaphysical standpoint from which the ethical problem has been approached. But, under whatever form Hedonism has appeared, the underlying motive actuating all its defenders has been to construct an ethics which would be altogether independent of morality and religion, in the sense in which these words are generally received and understood. The morality of Hedonism and Utilitarianism is known variously as positivistic ethics, lay morality, evolutionary ethics, the new ethics.

Idealistic thinkers have been no less active than materialists in attempting to formulate an ethics. Approaching the problem from the subjective side, they discover the determinant and sanction of morality in the autonomy of the will of man. That man ought to do certain things and to avoid others is for practically all thinkers a primary unanalyzable idea. "If any one denies the authority or validity (as distinct from the existence) of this idea of duty, such a vindication of its validity as it is possible to give belongs to Metaphysic. . . . To deny the deliverances of our own Reason is to deprive ourselves of any ground for believing in anything whatever. To admit that our Reason assures us that there are some things which it is right to do, and yet to ask why we should believe that those things ought to be done, is to ask why we should believe what we

see to be true." [1] The "ought," however, can receive no justification from any source outside man. The sole source and authority of every moral value is in our reverence for moral duty. "Act," Kant tells us, "as a member of a kingdom of ends." The individual, therefore, is the end of all morality as he is the guide to what is right and wrong. For Kant, the will is determined by certain rules which he calls categories. Since these categories are altogether authoritative, his ethics is known by the name of "Categorical Imperative." While it must be conceded that the Kantian theory has many points in common with Intuitionism and the Ethics of Reason, it differs from these latter theories in that it attempts to place morality on an exclusively scientific and philosophical basis by divorcing morality altogether from religion. How it has succeeded, we shall see below.

Hedonism.—*Hedonism* is an ethical theory which views pleasure as the ultimate test of the morality of human acts. Beginning with the Ancient Greeks, hedonistic theories have had a long and interesting history up to the present day. Aristippus, Epicurus, the Cyrenaics were representative Greek hedonists. Epicureanism exerted a profound influence on Greek thought, and also made its power felt deeply in Roman philosophy and life. With the advent of Christianity, Hedonism gradually declined and ceased to be accepted. In the sixteenth century it was resurrected by Hobbes and Locke. Hume, Paley, and especially Bentham, Mill, and Bain have contributed the most in modern times to the revival of the pleasure philosophy. Perhaps the most profound difference between the ancient and modern theories is the shifting of emphasis by the moderns from individual to universal happiness as the basis

[1] Rashdall, *The Theory of Good and Evil*, Vol. I, p. 102.

for morality. Greek Hedonism was frankly egoistic. Modern Hedonism is just as outspokenly altruistic, having abandoned altogether the individualistic ground of the ancient hedonistic theories.[1]

Utilitarianism.—Hedonism in modern philosophy is generally known as *Utilitarianism*. Utilitarianism teaches that the end of human action is happiness and that the determinate of morality is the pleasure or pain which results from our actions. Happiness, however, need not be conceived as the happiness of any individual. As J. S. Mill points out,[2] "the happiness which forms the utilitarian standard of what is right in conduct is not the agent's own happiness, but that of all concerned; as between his own happiness and that of others, Utilitarianism requires him to be as strictly impartial as a disinterested and benevolent spectator." In his famous work *Utilitarianism*, Mill states

[1] For a history of ethical theory the student may consult Paulsen, *A System of Ethics*, pp. 33–169. Paulsen's review of the Christian conception of morality is a travesty pure and simple, a common fault amongst modern ethical philosophers. That Paulsen himself felt such to be the case follows from his admission that "many will fail to recognize in the above exposition of Christianity and its conception of life, the picture which they may have formed of it."

The following works will also assist the student in obtaining a fairly accurate idea of the development of moral theory: Turner, *History of Philosophy;* Zeller, *History of Greek Philosophy;* Weber, *History of Greek Philosophy;* Sidgwick, *Outline of a History of Ethics;* Janet, *Histoire de la Philosophie Morale et Politique;* Watson, *Hedonistic Theories from Aristippus to Spencer;* Lecky, *A History of European Morals;* Rand, *The Classical Moralists;* Moore, *A Historical Introduction to Ethics.*

For a statement of Hedonism, consult Hobbes, *On Liberty and Necessity* and *Leviathan;* Hutcheson, *A System of Moral Philosophy;* Locke, *An Essay Concerning Human Understanding;* Hume, *Ethics;* Bentham, *Introduction to the Principles of Morals;* J. S. Mill, *Ethics, An Examination of Sir William Hamilton's Philosophy,* and *Utilitarianism;* Sidgwick, *The Method of Ethics;* Bain, *The Emotions and the Will.*

For a criticism of Hedonism, see Rickaby, *Free Will and Four English Philosophers;* Fox, *Religion and Morality;* Ming, *Data of Modern Ethics Examined;* Green, *Prolegomena to Ethics;* Rashdall, *The Theory of Good and Evil;* Martineau, *Types of Ethical Theory;* Bradley, *Ethical Studies;* Dewey, *Outlines of a Critical Theory of Ethics; Human Nature and Conduct.*

[2] *Utilitarianism*, Chapters II and III, presents Mill's ideas in a very forceful way. See also Douglas, *The Ethics of John Stuart Mill.*

the essence of his creed in the following forceful quotation: "It is the creed which accepts as the foundation of morals, utility or the greatest happiness principle, and holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure and the absence of pain; by unhappiness, pain and the privation of pleasure."

The Greeks had founded their pleasure theory on a quantitative basis. Modern Hedonism rejected this viewpoint, and Mill introduced the qualitative element into happiness, recognizing that the quality of a pleasure may make it more valuable than another pleasure, although the quantity of the two might remain equal. Later hedonists refused to accept this qualitative distinction, rightly arguing that it did away altogether with the whole concept of pleasure. Sidgwick takes this position, but tries to combine the pleasure criterion of conduct with a logical basis for his Ethics. He recognizes that morality is based upon reason and that the moral judgment which we express in the categorical imperative is something more than a mere affective state. His Utilitarianism is, therefore, a rationalistic, as distinct from the psychological, hedonism of his predecessors.

Criticism of Hedonism.—Hedonism appeals strongly to the beginner in Ethics for it appears, by its happiness theory, to correspond closely to, and at the same time to justify, the manner in which every man acts. Goodness causes us pleasure; evil, pain. From this fact, though quite illogically, the conclusion is drawn that we always do that which causes us the greatest amount of happiness.

Is happiness the ultimate sanction of morality? We assert that it is not. The element of truth in this theory cannot overshadow the significant errors to which it leads,

nor the almost insurmountable difficulties which its acceptance would entail. That the gratification of a desire gives us pleasure is an incontestable fact, and it is upon this simple fact that Hedonism bases all its exaggerations. Pleasure does influence, and is operative in a great number of our acts. That it is an exclusive principle and determinant of action is false both psychologically and ethically.[1]

Hedonism is but the sensationalism of Locke translated into ethical terms. Its materialism is basic, and therefore quite unacceptable. The determinist and positivist tone which runs through all the modern constructions of Hedonism is, to be quite frank, very jarring to any one brought up on Christian principles.

The psychology of Hedonism is only superficially true. Pleasure does not precede tendency, end, or good, but depends on a prior good or end. Hedonism places the cart before the horse by explaining desire in terms of an antecedent pleasure. The very opposite is the truth. Moreover "to attempt to justify (on hedonistic principles) the performance of certain acts commonly called moral by their pleasantness, and then to explain their pleasantness by assuming that they are moral and so sources of conscientious pleasure or means of avoiding conscientious pain, is to argue in a circle." [2]

Again, the whole assumption of Hedonism that pleasure is the only source of our actions is false. It is not true, and we appeal to every man's moral experience to justify our contention, that the pleasurable and desirable are interchangeable terms. Yet it is upon this false assumption that Hedonism has constructed the happiness theory. More-

[1] For the elements of truth in Hedonism, see Rashdall, *The Theory of Good and Evil*, Vol. I, pp. 31–37.

[2] Rashdall, *The Theory of Good and Evil*, Vol. I, p. 30.

over, the pleasure standard, for practical purposes, is useless as a sanction of morality. The measurement of pleasure or pain, not only for the individual, but a fortiori for the greatest possible number of individuals, defies all possibility. Bentham's calculus of pleasure is nothing short of an absurdity, as has been so often recognized since his day, and admitted even by Mill.

Finally, no code of morality could exist if it were to receive its sole sanction from the principles of the happiness theory. Pleasure is subjective, and its value as a determinant of action depends upon each man's estimate of what is pleasant and what is painful. No objective standards, capable of withstanding the storm and stress of individual judgment, are possible under such a theory. To which might be added the further observation that moral obligation or duty becomes a mere word in the hedonist philosophy. The worst that can be said about any action in this viewpoint is that the individual did not evaluate correctly the different pleasures presented to him and that, consequently, his choice was more or less imprudent. But that his act was morally wrong is a judgment which we are not justified in making.

That Hedonism is an unacceptable theory of morality, despite the prominence it once held in British philosophy, is evidenced by the fact that neither Mill nor Sidgwick could accept it in its purely psychological form. Present-day moral philosophers are no less unanimous in their declarations that the construction of a code of morals upon hedonistic and egoistic principles is impossible. As a theory of value, Hedonism is no less false than as a theory of ethics. To identify happiness and good is to exaggerate the rôle which happiness undoubtedly plays in our morality. Any theory of moral values which hopes to command our allegiance must strive both to be objective

and to satisfy the practical needs of conscience. Hedonism does neither.[1]

Criticism of Utilitarianism.—Mill's Utilitarianism presents itself as a refinement of the older hedonisms, by its synthesis of the egoistic with his own altruistic principles, coupled with the substitution of the qualitative for the purely quantitative standards of his predecessors. Instead of the happiness of the individual, the "greatest happiness of the greatest number" has been put forward as the end and sanction of morality. For Mill, the pursuit of happiness is not only the end of all moral endeavor, it makes actions moral. Since happiness is the end of life, actions which are good yield a surplus of happiness; immoral actions yield pain—happiness always being understood in the sense of the "happiness of all concerned."

The psychological basis of Utilitarianism, namely, that by our very nature we are compelled to pursue what is pleasant, is plausible enough, but not universally true. Moreover, the principle of the "greatest happiness of the greatest number" is a sophism pure and simple. For the happiness of the greatest number does not, in any real sense of the terms used, equal the sum of all our individual happinesses. It cannot become, therefore, a principle guiding the conduct of the individual.

Again, Mill acknowledges that virtue can be an end in itself, but very illogically it seems to us. For if virtue is *per se* desirable, it must contain in itself something which produces happiness. Pleasure, therefore, does not constitute, but follows upon, at least, some virtuous actions. The consequent pleasure cannot be the criterion which deter-

[1] Rashdall, *The Theory of Good and Evil*, Vol. I, pp. 7–38; Paulsen, *A System of Ethics*, pp. 268–286; Everett, *Moral Values*, pp. 104–145; Ming, *Data of Modern Ethics Examined*, pp. 57–80.

mines whether the act is good or bad. By consequence, the good is not made by being pleasant, and in this affirmation Mill gives away the whole foundation of Hedonism.

Mill openly admitted that the theory of Bentham, based as it is upon a calculus of pleasures, is untenable. He, therefore, insisted that pleasures may differ not only in quantity, but in quality as well. But by this admission he did not succeed in bolstering up the happiness theory. As a matter of fact, he introduced into it an element which logically destroys the whole utilitarian philosophy. We cannot conceive of pleasures differing in quality unless we assume, at the same time, that the standard for judging one pleasure to be higher than another is outside the pleasure itself. Pleasures may differ qualitatively because they result from diverse faculties, or from different kinds of actions in which a hierarchy of values is recognized to exist. Now, if we judge some acts to be more pleasurable than others, according to any standard outside the pleasure itself which results from these acts, we inject surreptitiously into the utilitarian position a principle which it has already repudiated. Nothing daunted, Mill, in order "to find a ground of distinction of pleasures with regard to quality, falls back upon the existence of a scale of rank among human faculties, and on the native tendency of the mind to approve of the conduct which is consistent with reason, regardless of how much happiness it procures. Resort to this principle for the determination of moral values is an abandonment of the first position of utilitarianism." [1]

Satisfied with the fact that human nature can desire something beside pleasure, later advocates of Utilitarianism, especially Sidgwick, admit that the happiness criterion is not universally admissible. It is, however, valuable as a means of correcting the generally received moral code.

[1] Fox, *Religion and Morality*, p. 266. The student should read the whole chapter.

This position involves the recognition of an "ought" and is, therefore, a definite giving up of the old egoistic theory.

Sidgwick attempts to reconcile the hedonistic standard with a rationalistic acceptance of an ultimate basis for morality other than mere pleasure. The principal objection to the theory of Sidgwick is that, although he acknowledges that morality cannot be established without postulating the existence of God and a belief in immortality, yet his whole position, which is materialistic and positivistic, makes such an assumption impossible. To which might be added another serious difficulty, namely, that his theory makes both egoism and altruism equally "reasonable" as a sanction of moral values. But if such is the case, what possible meaning for ethics can the word "reasonable" possess? The building of Hedonism on a rational basis appears to be a logical impossibility, and it must be confessed that Sidgwick's attempt has not succeeded in accomplishing the impossible.[1]

Evolutionary Ethics. Herbert Spencer.—In the last quarter of the nineteenth century, Utilitarianism underwent a series of profound changes through the application of the principles of world evolution to the theory of ethics. The main effect of this new standpoint has been to revolutionize the whole theory and outlook of present-day ethics. Principally through the efforts of Herbert Spencer, who was responsible for the first evolutionary ethical synthesis, the dynamic and naturalistic conception of morality has pervaded all modern thought concerning conduct problems, both individual and societal. Many modifications have been made in the original thought of Spencer since his day.[2]

[1] For a detailed criticism of Rationalistic Utilitarianism, see Rashdall, *The Theory of Good and Evil*, Vol. I, pp. 44–69. For further works on Sidgwick, consult Bradley, *Mr. Sidgwick's Hedonism;* Hayward, *The Ethical Philosophy of Sidgwick.*

[2] See especially Stephens, *Science of Ethics*, and Alexander, *Moral Order and Progress.*

In fact, it may be said without fear of exaggeration that the Data of Ethics is considered at the present time as old-fashioned as the other parts of the once famous Synthetic Philosophy. In spite of this loss of prestige, the Spencerian attitude and approach still deeply influence contemporary thought. A short statement and criticism of his ethical position, therefore, will enable us to understand and to evaluate correctly the ethical standpoints now current amongst us.

Spencer started with the assumption that all being, man included, is the product of evolution. Nature is governed by mechanical law, and must be interpreted mechanically. This is true not only of physical or biological phenomena, but of moral phenomena as well. We cannot understand moral action scientifically unless we express it in terms of vital activity. Likewise, since the two kinds of actions are convertible, the only correct approach to the ethical problem is by the observation of human conduct from the physical, biological, psychological, and sociological angles.

Moral conduct is considered to be a particular form of behavior, a particular adjustment of an act to an end. In essence the conduct of man does not differ from that of the amœba. It is true that we must recognize in adjustments to environment some sort of an ascending scale. Now, some adjustments tend to develop the individual; others, societal life. But, as Fox points out,[1] "here we find Spencer, as is not unusual with him, inserting into his theory a postulate which is in contradiction with it, but which he perceives to be absolutely necessary to make the theory compatible with the moral life. The substitution of the quantity of life for the quality as the aim of evolution, is a virtual admission that it is impossible to apply the doctrine of the survival of the fittest to the moral life,

[1] *Religion and Morality*, p. 274.

and that evolution does not explain morality."[1] For Spencer, the end of moral development is simply the development of life itself. And what criterion tells me whether an action makes for this development? Pleasure and pain. We have already pointed out that this position entails a false psychological reading of man's nature and the ends for which he acts.

Two characteristics of conduct manifest themselves as we ascend the scale of beings—homogeneity and heterogeneity. The more moral man is he who displays the most coherence in his acts. Equilibrium in our actions is the final test of their moral perfection. The moral man fulfills all functions. In all this, of course, there is no question of moral obligation, but simply of biological function, and Spencer only brings the concept of obligation into his theory by means of a back-door entrance. He acknowledges, however, that moral obligation exists, but looks upon it as purely vestigial, the result of moral compulsion which we generally associate with all moral judgments. When mankind has reached the goal of evolution, this sense of duty will pass away and man will always do right because he will be incapable of doing wrong. Viewed biologically, human conduct must be put on the same plane as all other life functions. That Ethics cannot accept such a view is apparent from a mere statement of the same.

[1] Rashdall, *The Theory of Good and Evil*, Vol. II, p. 365, thus states the elements of the Spencerian Ethics: "The ethical doctrine of Herbert Spencer may be said to contain three main elements: (*a*) the attempt to reduce the idea of moral authority or rightness in general to the inherited fear of social, regal, and divine or ancestral displeasure; (*b*) the attempt to explain by evolutionary forces, and particularly by the doctrine of natural selection, why this idea of moral authority or rightness came to attach itself to particular kinds of conduct to such an extent that the individual regards the moral rules in question as 'self-evident' or '*a priori*'; (*c*) the attempt to substitute a 'scientific' moral criterion for the 'hedonistic calculus' of empirical Utilitarianism."

The student should not fail to read the whole of Professor Rashdall's criticism of evolutionary ethics. To our way of thinking, it is final and leaves little to be desired. He might also consult Schurman, *The Ethical Import of Darwinism*, or Huxley, *Evolution and Ethics*.

Spencer's psychological basis for conduct is no less false than the biological foundation. That simple feelings have control over remote feelings and that remote feelings must control more proximate feelings, is a theory at variance with all the facts of mental life as we know them. The very fact of control is absurd on the evolutionary hypothesis, where everything acts according to blind law. "The fundamental fact of the moral life is that, as the guide of conduct, reason pronounces a judgment, indicating that a certain line of conduct *ought* to be followed, and the consciousness of the thinking subject manifests to him that he can comply with that direction of reason, or he can disobey it. There is no room in Spencer's theory of conduct for this fact. Moral obligation and determinism are incompatible. He tries to smuggle it in by making the terms *ought* and *must* convertible, and by using the term *authority* to express the preponderance of one force over another." [1]

Evolutionary ethics finds itself helpless before the task of constructing a practical code of conduct, for the reason that the individual plays a very minor part in its view. In the theory of evolution, society is looked upon as the primary unit of which each man is but a fraction. The organic conception of the state nullifies all individual obligation and responsibility, since no principle is capable of being framed which would compel a man to work for the good of the state as against his own individual good. Unless the individual has within himself some criterion of right and wrong, it is useless to demand from him obedience to the laws of the universe. Moreover, the Spencerian account of the genesis and development of such primary ideas as justice, right, and duty, is inconsistent with the facts of moral consciousness and the history of the race as it is known to us.

There is a great deal of truth in much of what Spencer

[1] Fox, *Religion and Morality*, p. 286.

has written about the influence of natural selection in the formation of moral codes, but its rôle has been unduly exaggerated by him. Likewise, his theory of the inheritance of moral ideas is more than doubtful. Even present-day evolutionists are not all agreed that moral ideas may be propagated by heredity.[1] Not only is the Spencerian theory relative to the origin of morality false, but the attempt which he makes to invest Evolutionary Ethics with the function of a guiding force for modern morality is doomed to disappointment. Nothing that evolution has yet discovered justifies us in assuming that a world in which pain will cease to exist or sin to be but a negligible factor in human life, lies within the realms of possibility. As a guide to action or as a sanction of morality, evolution has been proved bankrupt, and even Spencer himself was forced to admit that his theory had not "furnished him the guidance to the extent he had hoped for it."

Egoism.—By *Egoism* the moral philosopher understands any system of ethics which looks upon self-love as the sole

[1] "There is a constant disposition to forget that the 'struggle for existence' as a fact was a well-known element in human history from the very earliest times. The originality of Darwin's theory consisted in seeing its bearing upon the 'origin of species.' The struggle for existence certainly does not explain the 'origin of Morality' in the sense in which it helps to explain the 'origin of species.' At most it represents one of the complex forces which go to explain the fact of moral progress. It contributes an element to ethical history; but does it add anything to ethical theory? To a very limited extent I think that it does. It adds some shade of additional presumption to the other grounds which may be given for assuming that a rule of conduct which is *de facto* established in any society must have its origin in some consideration of social convenience, and that its observance must be in some way beneficial to that society. And, therefore, when we find ourselves feeling a strong repugnance to certain kinds of conduct, even though the repugnance be one which we find it difficult to justify on any rational principle, it is reasonable to assume that it probably possesses some utilitarian justification, which should make us unwilling to act against such an instinctive repugnance, unless we are very sure of our ground. Neither on Spencer's principles nor on any other can it be contended that this consideration compels us to acquiesce without question in each and every apparently intuitive disposition to approve or to condemn any kind of conduct." Rashdall, *The Theory of Good and Evil*, Vol. II, p. 375. Consult Dubois, *Spencer et le Principe de la Morale;* Cathrein, *Die Sittenlehre des Darwinismus, Eine Kritik der Ethik H. Spencers.*

sanction of morality. In its narrow sense, the term is applicable to every system which makes pleasure, happiness, or the perfection of the individual the highest good. Egoism assumes that all actions are motivated by self-regarding purposes, and therefore refuses to acknowledge the existence in man's moral life of the sentiments of benevolence or of disinterested desires. Egoism, either in its frankly Epicurean form or disguised as modern Utilitarianism, exaggerates the fact that self does enter into all our acts, by making it the determinant of morality. But if the Ego is the center and end of all endeavor, morality becomes but the pursuit of each man's happiness, and it is no less illogical to speak of obligation and duty than it is to endow with goodness acts of self-sacrifice, benevolence, or disinterestedness, which have always and everywhere been looked upon by mankind as the choicest fruits of the human spirit.

Altruism.—*Altruism* is the opposite of Egoism, and designates an ethical doctrine which regards actions of no moral value unless they tend to the benefit of others than the individual performing them. The social value of an act, in this philosophy, is superior to its self-regarding value, and it is only in the development of these altruistic impulses that the welfare of the individual, as well as the welfare of the body social, can be brought about. The welfare of humanity is made the goal of all moral endeavor.

Comte, the author of Positivism, developed the philosophical doctrine of Altruism along religious lines. The result of his efforts is known variously as the religion of humanity, humanitarianism, etc. Few of his followers have accepted his religious ideas, although philosophical Altruism manifests itself in the system of Schopenhauer in a very extreme form.

Altruism exaggerates the conflict which exists between the

self and other-regarding feelings. While it is quite true that no synthesis of the two can ever be made upon a purely subjective or psychological basis, nevertheless this antimony need not arise in an ethics which recognizes the existence of an objective norm for conduct. The principal difficulty which modern ethics has not been able to conquer is the false assumption that the ethically desirable and the psychologically desirable must be identified. The difficulties of choosing between acts, one of which is self-regarding and the other altruistic, are practical difficulties. They are not the result of the duties themselves. It is quite true that ethics must attempt to reconcile the often conflicting claims of self-love and benevolence, but it can only do so successfully if it looks upon duty as the result of the supreme purpose of the Creator, and subordinates the value of every human act to the values which God has ordained for every act which man is called upon to perform.[1]

The Categorical Imperative.—Kant's theory of ethics is subjectivistic. He repudiates every determinant of morality which proceeds from the assumption that the moral worth of our acts may be judged by their effects. The human will is the ultimate and only arbiter of what is right or what is wrong.[2] These rules of conduct which arise from the will are, of course, purely subjective, but when applied to all mankind they become objectively valid. Since the "ought" of each man's consciousness is both necessary and universal, it is an imperative. Happiness on the other hand is

[1] Paulsen, *A System of Ethics*—Chapter VI, "Egoism and Altruism."

[2] See *The Critique of Practical Reason, Metaphysic of Morality*, or *Selections from the Philosophy of Kant*, by Watson, for an exposition of the Kantian morality. For a criticism, Schurman, *Kantian Ethics* and *The Ethics of Evolution;* Porter, *Kant's Ethics;* Förster, *Der Entwicklungsgang der Kantischen Ethik;* Sentroul, *Kant;* Paulsen, *Kant;* Rashdall, *The Theory of Good and Evil;* Caird, *The Critical Philosophy of Kant;* Tilman-Pesch, *Kant et la Science Moderne;* Cresson, *La Morale de Kant;* Fulliquet, *Essai sur L'Obligation Morale;* Cohen, *Kant's Begründung der Ethik.*

personal and empirical. It cannot, therefore, furnish a law, or universal principle of action. Morality, by consequence, can only be determined by its formal content, and not by any objective reference. The will is autonomous, is an end to itself, for as Kant remarks, "autonomy of will is the solid principle of all moral laws, and of the duties which are in conformity with them." [1] Now, duty alone determines the will, and it is perfectly clear to every man along what road lies the path of duty. But what is duty? Kant expresses it thus: "Act in such a way that, in willing to act, you can will that the maxim of your act should become a universal law." This is the categorical imperative, from which two consequences necessarily follow. "In the first place, he assumed that out of this bare idea of a categorical imperative, without any appeal to experience, he could extract a moral criterion, i. e., that he could ascertain what is the actual content of the Moral Law, what in detail it is right to do. Secondly, he assumed that, so far as an act is not determined by pure respect for Moral Law, it possesses no moral value whatever." [2]

There is much to be praised in Kant's formulation of morality, although it is everywhere recognized to-day that his general principles, as well as his attempts to prove that any particular duty may be logically deduced from the Categorical Imperative, have been unsuccessful. The Kantian postulates of the existence of God and of the soul's

[1] Watson, *The Philosophy of Kant, Selections*, p. 270.

[2] Rashdall, *The Theory of Good and Evil*, Vol. I, p. 108. Rashdall criticises these assumptions and rightly concludes that they are unjustified. For without experience the mere idea of the Categorical Imperative will not enable us to decide in particular cases what is right. Like the coherence test of truth, its value is purely negative for it gives us no rule by which we can act until after we have already made up our minds as to what is good or bad. Duty for duty's sake tells us practically nothing of what we must do in specific cases. Neither does a categorical law necessarily exclude exceptions if we either explicitly or implicitly recognize the exceptions. "Kant confuses the inclusion of an exception *in* a moral rule with the admission of an exception *to* a moral rule." p. 116.

immortality, as well as his recognition of the fact that morality cannot be based on hedonistic principles, are likewise the groundwork of every Christian system of Ethics. Moreover, his insistence on the rôle of reason as the source of moral authority, and his acceptance of the order of duty as more primary than the order of happiness, are all principles which we can readily accept.

In spite of these acceptable principles, the Kantian Ethics cannot be defended. The "autonomy of the will," as he explains it, does away very effectively with the existence of God, since morality is altogether independent of any sanction on the part of the Deity. Not God, but the human will is the ultimate end of morality. Kant is quite right in contending that happiness cannot be the determinant of morality, but he falsely concludes that, since happiness is the motive of all our acts except in the case of those which proceed from reason, reason alone determines what is right. But, as we have pointed out above, it is false psychology to assume that the good and happiness are identical. Kant, therefore, since he makes happiness and goodness synonymous, in rejecting happiness as a determinant of morality, rejects at the same time goodness. In this he errs. The "good" is the object of desire, of all tendency on our part, and it must not be forgotten that the "good" is prior, at least logically, to the "right." Kant, therefore, in rejecting the good as the sanction of morality, could insist that only in reason would we find a formal source for Ethics. But his psychology is false, and the ethics built upon this defective psychology is no less false.

Again, the Categorical Imperative is a pure abstraction.[1] Conduct, however, is a practical everyday thing. It is

[1] Rashdall quotes Schopenhauer to the effect that the Categorical Imperative is nothing but the "survival of the drill-sergeant theology of eighteenth century Prussia with the drill-sergeant turned into an abstraction." Op. cit., p. 129.

moral or immoral. Human acts, therefore, must receive from ethics a sanction which can be of practical everyday value. No such sanction can possibly be derived from the Categorical Imperative, for how can we ever hope to determine whether any particular action is such that, if it were universalized, no absurdity would follow? The examples which Kant himself gives do not help to an understanding of how we may practically apply the Categorical Imperative. If it is not from experience, how then are we to judge whether an act can be universalized without entailing something absurd? The autonomous will does not finally determine what is right or wrong without a reference to external reality. Moreover, as it is possible to conceive of acts being wrong which involve no internal contradictions, so conversely it is possible to imagine some acts which are right but which do involve contradictions.

In the next place, if man determines what the laws of morality are, there can be no obligation in the complete sense of the word. For law is not something we impose on ourselves. On the contrary, it is something we recognize the existence of, and to which we must conform, if we would act morally. In spite of our will or inclinations, reason declares the law to exist, and if we violate this law, we do wrong no matter what the will desires. We would have very little reverence for the moral law if we felt that it was nothing but the human will determining itself. If the will is autonomous, in the Kantian sense, there is no need for a Categorical Imperative at all.

When Kant makes humanity the end of all moral action, he implicitly does away with his fundamental postulate of a Supreme Creator. Moreover, the criterion is in itself too vague to help us towards an understanding of what a man must do, unless we were certain beforehand what precisely is the end to be attained by mankind. Moral principles

cannot be founded on purely intellectual axioms. The task has been attempted so often, and Kant's system is but one more to be added to the many others in the history of moral philosophy, which have been shipwrecked on the rocks of formalism.

His other fundamental principle that we should "act as a member of a kingdom of ends" is no less futile from the practical point of view. For what does it mean to be and to act as a member of a kingdom of ends? What is the end of society or of the individual's life? The formula tells us nothing.

There is a great deal of truth in the Kantian formulation. Through it all runs the magnificent strain that there is such a thing as morality which is both intrinsically right and reasonably acceptable. But this truth is so mixed up with false assumptions and illogical conclusions that the Kantian Ethics is altogether unacceptable. We have already pointed out that morality cannot be established from its objective side, if by that we understand simply happiness. Kant failed to derive it from its formal or subjective side. Does there remain any other possibility or must we conclude, as some have done, that morality cannot be made reasonable?

Intuitionism.—*Intuitionism* answers this question by affirming that morality is both objective and universal and must be derived from the will viewed as reason. Since right and wrong inherently involve a reference to an end to be attained, the determination of this end becomes the supreme task for moral philosophy. Intuitionists find this end in the rational will of man. If our acts tend to the acquisition of purposes approved by reason they are good, for the simple reason that the rational will cannot approve as wholly desirable any end which is not good.

The word Intuitionism has been used in many different

meanings. *Naïve Intuitionism*, which supposes that conscience pronounces infallibly on the morality of every act as it presents itself is, of course, incapable of being defended, since both psychology and fact disprove any such belief. *Philosophical Intuitionism*, which asserts that our actions are moral if they follow laws which are universally and immediately recognized as right, is much more logical. However, it cannot be maintained, without involving ourselves in serious difficulties, that the mind intuitively perceives right and wrong, without any comparison whatever instituted by human reason. If such were the case, the moral sense would decide infallibly what is right without any recourse to reason, and there should follow unanimity of opinion about right and wrong.[1] This, however, we know to be false.

Reason, the Sanction of Morality.—Other thinkers give the name of Intuitionism to a theory of Ethics which we prefer to call the Christian philosophy of life or the Ethics of Reason. The name, however, is unimportant. If the thinker views morality as a reasoned and reasonable thing, and looks for its sanction in the rational will, we would agree with his philosophy, no matter what title he designates his ethical system by.

The determination of the morality of an act depends on a correct and logical determination of the end towards which that act tends. Now, nature exhibits a multiplicity of ends. And in man there exists a multiplicity of faculties tending to a wide diversity of ends. Can these diverse tendencies in man be reduced to unity and law? Harmony can be brought about, but only by the subordination of inferior faculties to those which are superior. Now, in a rational

[1] Recent advocates of Intuitionism are Porter, *Elements of Moral Science;* Calderwood, *Handbook of Moral Philosophy;* Martineau, *Types of Ethical Theory;* Whewell, *Elements of Morality.*

animal the controlling faculties are evidently reason and will. All activities, therefore, must be reduced to the end which the rational will judges good. This rationalization constitutes the end of conduct, the moral good. Human conduct is good when it is rational, bad when it does not follow the dictates of reason. Since the will is guided by intellect, there must exist some standard by which the speculative intellect determines whether or no an action is consistent with reason. What is this standard? The good of the whole. Will is tendency, intellect is judgment. When the intellect decides that a certain course of action will attain the end towards which the will naturally tends, the will of its very nature desires this perfect good. Just as there are first principles which the speculative reason accepts as soon as their terms become known, so there is a primary and universal tendency in the will to that line of conduct which is presented as rational. The will can be satisfied only with a perfect combining of its own activity with that of the intellect.[1]

The assertion that the ultimate sanction of morality must be found in the rational will does not mean, as many suppose, that reason cannot make use of subordinate standards to assist it in its judgment of the coherence or incoherence of the act in question with reason itself. As a matter

[1] "The intellect, as the guide of the will in the sphere of conduct, reads the nature of action in the various natures of all beings, in human nature objectively considered in all its aspects, corporeal and mental, in what pertains to the conservation and development of life, individual and specific, in the innumerable relations existing between man, his fellows, and all the objects with which life brings him in contact. As it perceives in the speculative sphere that certain conclusions are congenital to its natural bias, and therefore calls such conclusions true, it perceives certain relations between actions and their object, which it judges to be harmonious with its own nature; and others it concludes to be wanting in that harmony. The former acts it pronounces to be right and the others to be wrong, inasmuch as the presence or absence of the quality renders them consistent or repugnant to itself. The moral standard, then, is reason itself perceiving the order manifested in the nature of things, objectively expressed in things, subjectively apprehended in the intellect." Fox, *Religion and Morality*, p. 167.

of fact, reason constantly avails itself of such secondary criteria as custom, convention, authority, utility, happiness, etc. While it is true that such criteria cannot in the last analysis justify actions, yet they are helpful in concrete cases. The final standard consists alone in the correspondence of an act with the order existing in the universe as it is perceived by reason. This fundamental judgment may be stated thus, "Right is to be done; wrong avoided," and as such the judgment is universal, objective, and intuitive. By the application of this judgment to particular acts, we are able to determine, and infallibly, their morality.

Moreover, the judgment of the rational will is expressed in an "imperative ought." It is not merely a speculative conclusion from premises, but entails the duty of following this judgment, if we would act rationally. Of course, we are not forced against our wills. However, the obligation is there and remains, no matter how we act in particular cases. We cannot attain the end towards which reason inclines us unless we are willing to act in accordance with its decrees. Obligation, therefore, has its origin in the very nature of the mind which universally perceives and seeks for a rational order amongst the diverse and often conflicting activities of man.

The moral law is, therefore, a part of human nature itself, and in the mind lies the sanction for morality. The moral man is he who lives according to the highest rule of reason, who lives for the development of those ends and purposes which his intellect points out to him as worthy of the best in human nature. Morality, therefore, is not an imposition from an outside lawgiver. It is inherent in our own nature and in the very order of the universe itself—this is the proximate basis and end of all morality.

The Christian thinker, however, is not completely satisfied with this formulation for he is convinced that even

though reason is the proximate end of morality, this end is not all-sufficient, and that without an ultimate, all-embracing, and all-satisfying end a great deal of the force of the moral "ought" would be lost on the majority of mankind. Viewing the universe as an orderly unit, he looks upon God not only as the source of all being and thought, but as the final sanction of morality as well. Man, guided by reason, seeks out the moral good. But this good, as presented to him here below, is not really final because it is dominantly subjective. Is there not an absolutely ultimate good, objectively existing, which is the goal of the good of the subjective order? Is there not an ultimate truth and an ultimate good which, when the intellect knows and the will attains, perfect happiness must result? That such a good cannot be finite or created is apparent on its very face. Logic, therefore, forces us to the acknowledgment of the existence of a final good who is all-perfect and all-desirable, whose goodness is undetermined by the limitations of space or time, and in the acquisition of whom all our aspirations toward the good shall be completely satisfied. Right and wrong, therefore, as a judgment is final, and is founded in the very order of the universe itself, which order proceeds from God and reflects in its own finite way the perfections of the Divine Nature.

Since God is the ultimate sanction of morality, He is also the final standard of value. The Christian thinker, although not rejecting secondary standards, insists that the final test of all values is God. Not as they promote the happiness of the individual, nor even the race, can things be truly evaluated. Only when viewed *sub specie æternitatis* are we able to judge with finality as to the worth and value of everything in this universe.[1]

[1] For a more detailed exposition of the Christian Theory of Ethics, see Fox, *Religion and Morality*, pp. 163–208; Ming, *Data of Modern Ethics Examined*, pp.

Criticism of the Ethics of Reason.—A great deal of the criticism of the position which we are defending derives from the desire of moralists to define a sanction of morality independent of the existence of God and of the spirituality of will. But Christian ethics is incompatible with any metaphysic whose basis is materialistic and whose approach is either positivistic or evolutionary. Arguments, therefore, whose bias is materialistic cannot be answered here.

The objection which probably has the greatest influence with the beginner in Ethics is that which points out that the history of ethics seems to prove conclusively that there never existed a system of moral ideas which is innate, authoritative, and was or is now universally acceptable. What one race or one age considers a virtue, in another clime or time was looked upon as immoral. Evolutionary writers have at great length, and at great pains, ransacked the whole history of morality to point out these variations in the moral ideals of the different peoples.

To which we might reply that the fact that the moral judgment of mankind has developed but slowly, or that it manifests itself at different levels even in individuals of the same enlightenment, proves nothing against the a priori character of our moral estimates.[1] Because many men reason badly or cannot understand mathematics is no argument against the validity of the principles of thought or of the axioms of mathematics. The same may be said of our moral judgments, all of which need not be infallible, even though we claim them to be intuitive. Moreover, we are contending only for the primary principles of morality, and do not question the possibility nor the fact of men erring when they apply these principles to actual modes of

82–97 and pp. 117–146; Rickaby, *Aquinas Ethicus;* Feldner, *Die Lehre des heil Thomas über die Willensfreiheit.*

[1] Rashdall, *The Theory of Good and Evil,* Vol. I, p. 85.

conduct. Very often the primary truths of morality are ignored or false conclusions are derived from them, yet the objective rule remains the same. We do not assert that reason is infallible. All that we contend for is that the primary truths of morality are universal and binding on all men, as well as known to them if they do not deliberately close their minds to the light of truth.

It is urged against our thesis that moral judgments are most often formed instantaneously, which precludes the possibility of inquiry into the relation of the particular act to the general order of nature. We might answer by acknowledging the fact, yet insisting that even those acts are judged according to general principles which we understand very easily. Moreover, authority helps us greatly to the acceptance of moral standards since we recognize, at least implicitly, that authority is worthy of credence. Finally, it is only in more or less extraordinary cases that we must reason as to the relation of our acts to the fitness of things. So many acts are patently contrary to reason that no long reasoning process is required to pass judgment upon them.

A very common objection to the Christian standpoint in Ethics may be stated thus. The sanction of morality in every religious system depends solely on the will of a Divine Lawgiver who decrees an act right or wrong simply because He wills it so. Nietzsche calls this "slave morality." This is one of the most stupid difficulties ever urged against Christian morality. For us, right is right and wrong is wrong, antecedent to and wholly independent of any law or any lawgiver. Rightness results from the very nature of man and of the universe. Just as God cannot square the circle, so God cannot decree that which is right to-day may be wrong to-morrow.

Again, it is objected that we need not construct any standard of right or wrong outside of man himself. Man

should be the standard of everything, not considered in himself but in the race as a whole. The happiness or welfare of mankind in general is the only worthy end for all our actions. The answer to this difficulty may be very brief. Humanity is a mere word, an abstraction. There is no humanity or society outside of the individuals who compose society. The end, humanity, is nothing. It is not the sum total of the happiness of each individual, neither is it attained unless every individual becomes perfectly happy. The good of the individual is supreme and, unless each individual is destined to an end which confers value on his moral life, it can make no difference to him what or how the welfare of humanity is to be attained. *Salus populi suprema lex* is very true as a legal maxim. It always presupposes, however, that the end for which the individual must act has been agreed upon and is of such a character that of itself it is sufficient to elicit the individual's adherence. But "if the individual end and good is not sufficient to impart a supreme significance to life, and to consecrate with the stamp of authoritativeness the claims of duty and the obligation of self-sacrifice, it is idle to assert that life will derive this supreme value, which it lacks, by devoting itself to other lives as worthless as itself." [1]

The moral order presents to the inquiring mind as significant and as sublime a system of truths as does the physical order. Morality is reasonable, but its true sanction and justification can only be discovered if we view correctly the end for which man acts. Neither Hedonism, Utilitarianism, nor Evolutionary Ethics supplies a convincing ground for moral obligation. That there are elements of truth in each one of these theories goes without saying. But the exaggerated psychology, as well as the false metaphysic, which

[1] Fox, *Religion and Morality*, p. 179. Further difficulties will be found summarized from Sidgwick by Rashdall, *The Theory of Good and Evil*, Vol. I, pp. 80–102,

furnish the majority of the arguments upon which these theories rest, are incapable of standing the fierce light of an unbiased scientific criticism. Neither the individual's happiness, nor that of society as a whole, furnish a sufficient motive for avoiding evil and striving after good. The satisfaction of the Self is manifestly no rational guide to morality. On the other hand, the happiness of others provides no motive why the individual should practice the self-regarding virtues. Evolutionary Ethics has developed historical investigation in the moral sciences, and for that it merits praise. Yet every one to-day is agreed that Natural Selection is neither an explanation, much less a motive, of the origin and development of the moral sense in the human race.

The constant warfare made, during the last century, upon the stronghold of Christian morality has not, despite many predictions to the contrary, resulted in its capitulation. The distinction between good and evil, founded upon the intuitive judgment of each man, and objectively expressed in the order of the universe itself, still remains the most reasonable and universally accepted standard of morality. Above all things, it is a constructive theory of morality, whose pragmatic sanction is no less evident than its a priori truth. Man has an ultimate end—God himself. When reason, therefore, points out to us where duty lies, we act not in the name of reason alone, but also in the name of Him from whom all things take their origin and towards whom all things tend. Endowed with freedom, the will may or may not follow the lead of reason. The moral imperative remains, no matter what our actual conduct is. If, however, we translate into living the mandates of conscience, our conduct, since it is free, possesses a value far in excess of any value inherent in the activities of the physical world.

The Ethics of Reason is firmly grounded both in science

and in philosophy. Our analysis of its principles, as well as the contrast of them with other philosophies, confirms this judgment. If the student requires further proof, we point to the influence of this high morality during the last nineteen hundred years. Not only in the course of society, in the many forms in which it has appeared, has this elevating and wholesome influence been experienced, but in the estimation of the plain man as well Christian Ethics has held almost universally the chief place as a guide and a sanction of the highest morality.

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CHAPTER X

THE PROBLEM OF THE SELF

In the brief and inadequate review of the central problems of philosophy which we have hitherto made, the existence of the Self was postulated throughout. No effort was expended to analyze or to justify by argument this assumption. We proceeded on the theory that all men must acknowledge the existence of the Self and that all are agreed, at least in its large outlines, upon the essential elements which go to make up our conception of the nature of the Self. This postulate must now be analyzed somewhat at length.

The philosophical position, that of dualistic realism, which has been taken and defended up to this point in our study, presages what our theory of the nature of the Self shall be. In fact, the conclusions which have resulted from an investigation of the different problems of philosophy have a direct bearing on the question of the Self. The Self is both the beginning and the end of every philosophical inquiry. Since we can only discover the nature of reality by way of the knowledge process, the mind thereby assumes an important significance in every definition of the Self. For it is the mind or the Self which knows, reasons, and reaches definite conclusions as to the reality and essential character of this universe of which it also forms a part.

On the other hand, our formulations of reality, of knowledge, and of morality react upon and help to decide our philosophy of the Self. If, perchance, we read the universe in terms exclusively of a physical reality, there remains no

place in our viewpoint for a philosophy of substantiality, spirituality, or immortality of mind. Contrariwise, if our approach to the problems of the Self lies along the road marked out by either spiritualistic or idealistic thought, we shall most certainly arrive at a quite different terminus than the one which modern materialism attains. The question of the nature of the Self, therefore, becomes cardinal in every systematic solution of reality. It opens the doors both to a philosophical view of the cosmos, and, at the same time, sums up in itself the conclusions of our best thought on the problems which the cosmos presents to the mind for its investigation and solution. There is little possibility, therefore, of overstating the importance of this problem for philosophy. Philosophy remains even to-day, despite all efforts to change its current, dominantly egocentric. Each generation wishes to know the answers to the questions—What are we? Why are we here? Whither are we tending? No adequate philosophy can hope to escape, or should desire to escape from these questions which every man asks of it.

Nor do we get rid of metaphysical questions by keeping them in the background or by refusing to discuss them in explicit terms. For, as Professor Dewey points out, "the philosophic implications embedded in the very heart of psychology are not got rid of when they are kept out of sight. Some opinion regarding the nature of the mind and its relations to reality will show itself on almost every page, and the fact that this opinion is introduced without the conscious intention of the writer may serve to confuse both the author and his reader." [1] Furthermore, the refusal to discuss these problems has not strengthened, in our opinion at least, the scientific character of modern psychology.

What is the Self? The ordinary man would answer by

[1] *Psychology*, page iv.

saying that the Self is the I who lives, walks, eats, sleeps, feels, remembers, and thinks. For him there is no mystery at all in this. The Self presents itself as a series of activities, differing somewhat amongst themselves, but all the result of the action of the Self, or the mind, person, soul, ego, consciousness, or what-not. Many psychologists today take this functional viewpoint and look upon the Self as a mere binder of activities. Now, no one can doubt that these activities are an integral part of the Self, that the Self reveals itself in its actions. But are they the *whole* of the Self? Do we describe the Self correctly when we describe all the functions which it is capable of performing? Many thinkers would answer that question in the negative, contending that the Self is something more than its functions, that it is substantial, although all would not agree as to the metaphysical ideas implicit in the word "substance."

It is often assumed, in present-day psychological discussions, that when we have described the content of the mind we have given an exact picture of the nature of mind. This assumption, however, fails to recognize the truth that the content of consciousness and the activities of consciousness are by no means identical. For the "phenomena of consciousness are always conscious activities as truly as they are contents of consciousness." [1] A mere description of the content of the mind, therefore, is no answer to the problem of the nature of mind. Nor should we confuse the opinions current amongst thinkers as to the idea of the Self, with the idea which is representative of the nature of the Self. There is a valid distinction, which in all this discussion must never be lost sight of, between the idea of the Self and the Self. Of course, no scientific explanation of the

[1] Ladd, *Philosophy of Mind*, p. 86. Read the whole chapter "The Concept of Mind" for a review of the many false assumptions which clog, from the very outset of the discussion, a correct analysis of the problem of the Self.

nature of the Self can begin otherwise than with a consideration of the manifold experiences of the Self. This statement, however, implies much more than the thought that the Self is a mere "collection or bundle of experiences." [1]

Intimately connected with, but quite different from the question as to the nature of the Self, are the other problems as to its unity and its abiding identity. That the Self is one appears to most of us in the nature of a psychological *inconcussum*. But what is meant precisely when we speak of the unity of consciousness? The term "unity" may be interpreted in many, and it must be acknowledged, conflicting meanings. Consciousness unquestionably presents a plural side. How can this multiplicity be reconciled with its assumed oneness? Because the term "I" expresses unity, we need not conclude that the "I" is distinct from its own states. Perhaps the "I" is simply a term which expresses the fact that my mental states are distinct from "your" states. Moreover, unity is of different kinds, ranging all the way from the accidental unity which, for example, a class presents to that which a substance, in the metaphysical acceptation of the term, undoubtedly must possess. Some psychologists see in the unity of consciousness only a unity of purposes, or of interests, or of meaning, or of relations between the mind and its idea of the Self.[2] It shall be our function, therefore, to specify somewhat in detail what the unity of consciousness must mean.

[1] Laird, *Problems of the Self*, p. 13.

[2] Parker describes his conception of the unity of the Self in the following terms: "The unity of the mind consists, in the first place of the contact of the self with content; and, in the second place, of the interweaving of the many activities, which are the self, one with another. The activities are interwoven amongst themselves and with the content, and this woven web is the mind." *The Self and Nature*, p. 27.

Of course, if Parker's description of the Self as an "interweaving of its activities" be correct, his conception of the unity of consciousness may likewise be sufficient. We cannot, however, accept as true his analysis of the Self.

From what has been said there remains small need to emphasize the strategic position which the problem of the Self must hold in the face of the great questions presented to the philosopher, not only by his own philosophy, but by psychology, physics, and mathematics as well. The question is fundamental, and has always been recognized as such, throughout the whole history of human thought. It was discussed, and quite vigorously, in ancient Greek philosophy. It remained, however, for Christianity to emphasize the really central position which the problem must hold in philosophical speculation. The theological doctrines of the nature and destiny of the individual soul, coupled with the Christian scheme of ethics, was sufficient motive for going into this question more deeply and more thoroughly than Greek philosophy did. Modern thought, since the days of Descartes, has occupied itself very extensively with this same question. Contemporary philosophy, too, is making a great deal of the problem of the Self, thus reversing the position of the thinkers of the last century who saw in it nothing but a matter for useless metaphysical speculation. The study of mind from the experimental point of view had occupied so important a place since the days of Wundt that its metaphysical aspects had been practically ignored. The tendency of psychologists during the latter part of the nineteenth century was "to explain the self in terms of something else. The increasing tendency, nowadays, is to explain other things in terms of the self." [1]

The question, therefore, is—What is the mind? Nothing seems more certain than the fact that minds exist. But when we proceed a step further and attempt to state in definite terms what the nature of mind is, difficulties begin to crowd in upon us. As has been pointed out, the majority

[1] Laird, *Problems of the Self*, p. 3.

of psychologists refuse to entertain the problem, asserting that their position, being purely empirical, leaves no place for such problems. It is to metaphysics then that we must turn for a reply, and it must be confessed that on few questions are more divergent, not to say contradictory, views expressed.

The Meaning of Mind.—A great deal of the confusion, which attends every attempt at an analysis of the concept of the nature of the Self, results from a lack of uniformity amongst thinkers in their use of such terms as mind, soul, person, consciousness, and Self. The situation as regards terminology is very unsettled, and resembles, according to Hoernlé, "a patient in a critical condition, with a multitude of doctors disagreeing on diagnosis and treatment." [1] Although it would be asking too much of all philosophers to accept our definition of these terms, nevertheless we deem it vital to present our understanding of what the mind is, since upon this definition will depend, to a large degree, whether our theory of the Self can be made acceptable to the inquiring student.

The word *mind* as used by us is practically synonymous with *soul* or *person*. This is common everyday usage, and nothing but verbal hairsplitting can take exception to such use. In making "soul" the practical equivalent of "mind," there is no idea of introducing into a philosophical discussion the many theological implications which are inherent in or have grown up through the centuries about that much maligned term. Consciousness, too, might be regarded as coextensive with mind or Self, despite the fact that the newer schools in psychology, by their very abuse of the term, have made it appear to imply the existence of certain mental strata which, when combined, make up the

[1] *Matter, Life, Mind and God*, p. 130.

structure of the mind itself. Because the term "consciousness" entails few metaphysical assumptions, its almost universal use in psychology has given it the position of a consecrated word. This use has also left the door open wide to the functional or behavior view of mind and has, without sufficient argument, convinced many that when we describe the field of consciousness our task is completed, and nothing else need be attempted. For this reason, in our opinion, it seems much better to return to the use of such terms as person, mind, Self, and to state the problem in these terms rather than in those of consciousness, mentality, etc.

Again, our knowledge of the mind or of its nature does not come by intuition of an abstract Self called the soul. No one contends that we possess intuitively or otherwise the concept of a pure spiritual being. If we are ever to know the nature of mind, there is but one way to discover it, namely, by reflective thought on the concrete experiences of which each man's consciousness is now or has been in the past aware. This analysis does not create for us a new entity, which we call mind. It simply makes explicit what was all the time implicit in our different mental experiences and states. Nor do we deny that this product of reflective thought is itself a mental process. To suppose otherwise would be to suppose that the mind could possess a concept which is, in the last analysis, not a concept at all.

Furthermore, as it is by a process of reflection that one arrives at a definite concept of self-consciousness, so the generalizations which we make after a study of such thought data imply thought activity, as well as the existence of the data which memory brings to such a process. Our concept of the individual consciousness, therefore, is a product of much thought. It is enlarged and corrected by daily experience. To no one, as far as we know, comes the ludicrous experience of Jean Paul Richter, who at a tender

age had revealed to him the inner meaning of the *I*.[1] From my concept of the mind as presented in my own conscious experience, I reason to the nature of mind in general. These latter concepts are indeed abstract, but for all that they are no less real than the concrete experiences upon which their validity is founded.

To sum up, mind designates for us a subject or a principle which is the ultimate source of mental life, the cause of our thinking, feeling, and willing. A Self is one who possesses a mind from which, as a final source, all the mental activities of the Self proceed. In this view, therefore, mind is something more than a mere series of happenings, sensations, emotions, or thoughts. While our analysis has tended to an undue emphasis on the mental side of life, it must not be thought that from the activities of the Ego we wish to exclude those of a purely or dominantly physical nature, as for example, locomotion, nutrition, and reproduction. Such functions are the products of a nature which is at once material and spiritual. The mind, however, is the controlling force of all activity. It is the first principle of the life of the human compound, and as such, to it must be referred back, as to a principle or cause, all the diverse functionings of the compound itself.

The above analysis of the meaning of the term *mind* eventuates into the thesis of the substantiality of mind, which we shall defend below. We need not return here, however, to a restatement of our idea of substance. This has been done above in the chapter which treats of the psycho-physical problem. Yet, it might be well to recall that the conception of mind-substance as a sort of inert mass upon which successively appear different mental processes, is a grotesque travesty of the idea of substance. The mind and its functions are not two different things

[1] See Ladd, *The Philosophy of Mind*, pp. 90 et seq.

which may exist separated from one another. As there is no mind without its processes, so there can be no processes without a mind. The distinction between substance and accident as between two disparate things set up by the defenders of a function psychology, exists nowhere except in their own imaginations. A substance is that which *stands by itself;* an accident is that which *inheres in another as in a subject.* As an accident cannot exist ordinarily except in a substance, so a substance does not exist without accidents. When, therefore, we assert that the mind is a substance we simply mean to state that mental action is inconceivable unless one supposes the prior existence of some one who so acts. If sensations, emotions, thoughts exist, then a subject who has sensations, emotions, and thoughts must also exist, to whom these functions are related as passing states, but which do not sum up in themselves the totality of mental reality.[1]

The history of the problem of the Self in modern philosophy begins with Descartes who, in his famous phrase "*cogito, ergo sum,*" summed up amidst universal doubt his firm belief in the reality of the Ego. The extreme metaphysical dualism of Descartes, however, gave to the question of the nature of the Self a false trend and direction which it has never been able to correct. Locke accepted the doctrine of a soul substance, while denying the possibility of our ever knowing what this substance is. To the days of Kant, who looked upon the Self as the organizing power of knowledge, no one, with the exception of Hume, denied the reality of the substantialistic theory of the Self. Hume, however, vigorously contested the philosophy of a mind-substance, insisting that the essence of Self consisted in activity, and that our knowledge of the Self could not pro-

[1] For a further analysis of the idea of mind-substance, we refer the student to Mercier, *Psychologie,* Vol. II, pp. 241 et seq.

gress beyond an acquaintance with the impressions, sensations, and feelings which we are constantly experiencing.

Contemporary thinkers have followed in the main either the lead of Kant or that of Hume. Present-day Idealism sees the Self as the center of all experiences and the answer to all the riddles of the universe. Thinkers, like James, have accepted the Humian standpoint, and have developed the "stream of thought" hypothesis, or such like theories, in explanation of the nature of the Self.

Materialism has been no less vocal than Idealism in urging its position on modern thought. However, the identity of matter and mind has not been expounded by this school in so many words. In outlining the nature of consciousness, the new materialists depart from the idea of consciousness as an entity or a subject, and view it more as a behavior or a function. Consciousness is thus regarded as a relation between objects. When we ask them to explain further this relational view of consciousness and to state in express terms between what things the relation exists, we are told that it is a special kind of relation between the brain made conscious and the object about which it is aware.[1]

Recent studies in psychiatry and in psychical research have bestowed added importance upon the problem of the Self. However, it may be said that these investigations on the disorders of personality have added little of lasting value to our knowledge of the Self. Certainly, nothing has been discovered which tends to shake or, for that matter, to confirm our beliefs, either in the unity of consciousness or in the substantiality of mind. [2]

[1] For a fairly complete statement of the neo-realistic doctrine of Consciousness, as well as for a criticism, see Macintosh, *The Problem of Knowledge*, pp. 258–309; also Kremer, *Le Neo-Realisme Americain*, pp. 234–256; Perry, *Present Philosophical Tendencies*, pp. 271–303.

[2] The recent literature on the different phases of personality is immense. We refer the student to works by Prince, Sidis, and Goodheart for a discussion of mul-

Materialism and The Ego.—Modern Materialism has its roots in the philosophy of David Hume. It must be acknowledged, however, that the principles and arguments set forth by Locke in his assault on the idea of substance led naturally and logically to the conclusions maintained by empiricists of every shade and hue since the days of Hume. According to this latter philosopher, all reality, including that of our conscious states, must be reduced to a series of mental processes in constant flux and movement. An abiding being, therefore, is an utter impossibility since the idea presupposes that something persists without any change. There is indeed such a thing as material identity, but beyond that we cannot go, for sensation gives us no data upon which to build a belief in any other kind of identity. Later followers of Hume, especially the Associationist School, developed at some length his fundamental principles. Present-day Sensism is largely the offspring of the Humian critique of the substance hypothesis.

Criticism of Sensationalistic Phenomenism.—Many unanswerable arguments may be advanced against the position maintained by empiricists relative to the nature of the Ego. In the first place, the empiricist has no right to speak of an "act of mind," since his whole conception of mind is one which assumes that mind is nothing but a constantly changing series of mental states. In such circumstances, the introduction of an act of the mind into our discussion is to grant the very point at issue.[1]

Again, the sensist in order to deny the existence of the Self, postulates the existence both of the I and of other selves with the purpose of proving that such a thing as the Self cannot exist. This practice, of course, constitutes

tiple personality, and to Freud and Jung for an authoritative statement as to the position of psycho-analysis; for a criticism, Laird, *Problems of the Self*, pp. 272–303.

[1] Laird, *Problems of the Self*, p. 326.

nothing short of a *reductio ad absurdum* of every species of phenomenism.

Furthermore, no believer in the mind-substance theory conceives of mind as a static, changeless entity, at least in the sense pictured by Hume. The Self is dynamic; it grows from day to day; there exist almost infinite degrees of selfhoods. The Self, too, organizes the material which is brought to it in our manifold experiences. This fact, however, does not prove that the underlying substance itself changes with every change in activity from one species of reality into another or different kind of reality. There can be growth without substantial change—the material universe exhibits myriad examples of such growth. What then is there to prevent the mind from growing according to the laws of its own being?

To the advocates of the function theory of consciousness, we ask an adequate and rational explanation of such primary mental states as memory, reasoning, judgment, and self-conscious reflection. But such explanation is not forthcoming. Memory assuredly postulates the continued existence of a subject capable of comparing the past with the present. Reason and judgment no less demand a single subject which can decide between two or more ideas as to their coherence or lack of coherence with one another. Self-conscious reflection implies a unitary being which is not only capable of reflecting on its past acts, but is conscious, at the moment of reflection, that it is reflecting. Much might be said of these primary processes of mind. Their very existence is jeopardized unless we are willing to acknowledge that the Self is a unit which, despite constant fluctuations and changes, remains the same; in other words, that mind possesses an abiding identity which persists no matter how many or how diverse its states may be.[1]

[1] Laird proposes what seems an unanswerable objection against the very basis of

Materialism has made a great deal of the disorders of personality, particularly as manifested in cases of pathological disintegration of the Self, to prove their thesis that, since brain and mind are identical, no theory which recognizes the Self as abiding is capable of defense. These cases of disintegration, however, do not prove the disintegration of the Self as such. The unity of selfhood remains throughout the disorder, despite the fact that it is obscured at times because of the overshadowing effects of the nervous condition from which the patient suffers. There is, in no intelligible sense of the word, a plurality of personalities in such individuals, but simply a series of "so-called selves." To call such states "selves" is to indulge in a pretty, but unscientific metaphor.[1]

The Stream of Thought Theory.—Materialism, either in its crude form, or as Associationism,[2] is regarded quite universally as having failed in its interpretation of the nature of mind. Mill himself admitted that he could not explain how a series of feelings could possibly be aware of itself *as a series*, and by this admission, gave away the whole case for Sensism. In our own times, Professor James has returned to the associationistic theory, though in a slightly modified form. For James, the Self is a "stream," each part of which knows the preceding part, and by this knowledge is acquainted with the whole past of itself. Thought and thinker are one, and the Ego is but the thought of the

Hume's empiricism. To quote, "Hume believes that the only possible identical object is a changeless atom, but it is impossible to find such objects among impressions and ideas. . . . It is safe to say that if the only legitimate sense of identity is material identity, then there is no identity in the things we are wont to consider substances. A changeless atom may possess material identity, but stars and planets, plants and animals, the eternal mountains and the soul of man do not. And that is enough to give us pause." *Problems of the Self*, p. 326.

[1] Leighton, *The Field of Philosophy*, p. 443; Maher, *Psychology*, pp. 487–492; Ladd, *Philosophy of Mind*, pp. 148–189.

[2] For a history of the Association Psychology, see Warren, *History of the Association Psychology.*

moment. How can this possibly be? By appropriation, for the "I or Self is a *Thought* at each moment different from that of the last moment, but *appropriative* of the latter, together with all the latter called its own." [1]

In criticism of the position of Professor James it may be pointed out that to call mind a "stream" instead of a "series of states" possesses a higher descriptive value perhaps, but is no nearer the truth of what the mind actually is. Mind is not *solely* a stream or a series, although when viewed from one angle it does present a dynamic character. Neither has the method of "appropriation" any great advantages over the view that the series becomes aware of itself as a series. It is more plausible when first presented, we admit, but when analyzed it is very difficult to understand how any preceding mental state can possibly sum up in itself all the mental experiences of a lifetime, as demanded by James, and, of which, by the way, the state itself is totally unconscious. But the most formidable argument against the Stream of Thought theory is that from the facts of memory. James admits that his theory "begs" memory. But memory must be explained if any theory is to be at all representative of the totality of mental life. At all events, the empiricist in psychology is the last man on earth who should offer for our acceptance an explanation of mind which fails to explain the rôle of memory in man's conscious processes.[2]

The more recent accounts of the nature of the Self, proposed by advocates of the neo-realist school, have not overcome the objections ordinarily leveled against the older materialisms.[3] To define mind as "action and contents," [4]

[1] *Principles of Psychology*, Vol. I, p. 401. For the full statement of the Stream of Thought Theory, see Vol. I, pp. 224–402.

[2] Maher, *Psychology*, pp. 477–481.

[3] For the neo-realistic definition of mind, consult Perry, *Present Philosophical Tendencies*, pp. 271–305; also Holt, *Concept of Consciousness*.

[4] Perry, *Present Philosophical Tendencies*, p. 304.

in which definition the word "action" summarizes interest and nervous system, is not to give a satisfactory or a total picture of consciousness as psychology presents it to us by means of introspection and experiment. The sum of the activities of mind, coupled with its content, does not equal mind, for mind is something more than a mere aggregation of its own states. As a matter of fact, this definition is only another way of saying that the brain equals mind, a postulate which has not been proved and is wholly unintelligible.

Moreover, to speak of consciousness as "a selective relation among things," [1] does not advance our knowledge of what the mind is, even supposing that we agree with—which we do not—the view that consciousness is merely a relation. Present-day realism of the monistic type, based as it is upon the prejudice that only one reality exists, has not succeeded in its efforts to interpret consciousness in terms of brain activity in a way that would be acceptable. Although this theory is not so obnoxious to the defenders of a spiritualistic view of mind as was the frank and outspoken materialism of the eighteenth and nineteenth centuries, nevertheless its influence has been altogether bad, both in psychology and philosophy, since it has served to keep alive opinions which should have been discarded long ago. [2]

Idealism and the Ego.—Idealism, although concerned more with the problems of the content of consciousness and the value of knowledge than about the nature of consciousness, has given us a theory of the Self in line with its fundamental assumption that all reality is mind. This position, generally referred to as Idealism, might much better be called Mentalism or Psychism.

[1] McGilvary, *Journal of Philosophy*, IX, p. 249, 1912.

[2] On the differences between the points of view of American and English neo-realists relative to consciousness, consult Macintosh, *The Problems of Knowledge*, pp. 289–292.

Kant's theory of the Ego is the source of all the contemporary idealistic interpretations of the Self. His immediate disciples, Fichte and Hegel, developed the Kantian thought, Fichte emphasizing the moral side of selfhood, while Hegel tended to submerge the individual self in the all-embracing Absolute. Modern followers of Kant have stressed either the intellectual or volitional aspects of his doctrine of the Self, according to each thinker's estimate of the supreme place which intellect or will must hold in a sound synthesis of reality.

Kant's Theory of the Self.—Kant's well-known objections to a substantialistic theory of the soul were based on his distinction between phenomenal and noumenal knowledge. Experience, he contended, gave us no argument for concluding to the existence of a soul substance. Likewise, the a priori idea of substance is not necessarily involved in the idea of self-consciousness. The "Ich denke" is merely a formal condition of thought. Translated, it means, "I am the logical subject of my own thoughts." But it is quite illogical to pass from this formal logical subject to the conclusion that a metaphysical I, or an I as substance, exists. The I is purely formal; it is a subject, not a substance. If the I were a substance, I should be able to see it. But it is as impossible to perceive a substance as it is to see space and time. Substance, no less than space and time, is an a priori category, which may be understood but cannot be perceived. The whole of rational psychology, therefore, is built upon a series of paralogisms. Kant, however, did not deny that the Self may be a substance of a noumenal kind, and believed, by this admission, that he had saved for knowledge the reality of the I who thinks.[1]

[1] Laird, *Problems of the Self*, p. 633. "The noumenal, or hyperphysical substance of what appears as matter might, in fact, be not composite but simple, and the

Most modern philosophers are altogether too ready in admitting that Kant destroyed for all time the doctrine of soul substance. But such a belief can only be accepted by those who are willing to agree with the Kantian distinction between noumenon and phenomenon. There is an increasingly large number of philosophers to-day who do not acknowledge that this distinction is based on facts or is necessary for an understanding of the knowledge problem. Likewise, his assumption that our consciousness of the Ego is that of a purely formal principle, and not of an empirical self, cannot be maintained. This position is defended only by those already convinced that our knowledge is relative, and that, therefore, knowledge can never give us any information about a substance as real, nor point to the real existence of a substance.

Furthermore, even granting the truth of the distinction between phenomenon and noumenon, we can only extend this principle to the mind's knowledge of its own acts by falsifying altogether the nature of human knowledge. It is possible that the mind may be deceived in its knowledge of the extra-mental world. But such deception is hardly possible in the *immediate* consciousness which the I possesses of its own states. In the mind, at least, when reflecting on its own processes, there is no reason for conceding the existence of appearance, phenomena, or such like possibilities of error.

Finally, the Kantian criticism of mind-substance supposes that the Self should be able to attain a clear and perfect vision of the abstract Ego, divorced from every particular or concrete experience. But, as we have already pointed

appearance of composition be due to the fact that it is revealed to us in space. Such a substance, Kant maintains, might be the substance both of thought and of matter or of the self and the matter." Laird gives both Kant's theory and his argument in a very fair, concise way. See also Weber, *History of Philosophy*, pp. 453–456.

out, such a vision is manifestly impossible, no less than unnecessary. What the transcendental Ego may be is a matter for poets to dream over. The philosopher can perceive his own mental states, can analyze them, and on this analysis erect a synthesis which will tell him a great deal about the real nature of the Self. It is the concrete experiences of the Self which open the way to an exact knowledge of the nature of the Self. To begin with an abstract or pure Ego, however, is to start from the wrong place in our philosophical journey, and it is to end up in a scepticism such as enveloped the whole body of speculative thought of the Great Sage of Königsberg.[1]

For Hegel, substance, in as far as it related to a soul, was abandoned because he viewed substance not as a substrate of anything, but as the sum of all the modes of a thing. Since substance could not become the object of experimental research, it was a mere chimera. The thing expresses itself in the unfolding of its modes. The soul, therefore, is not a static substance, but a living totality which, as an effect, reveals the cause thus manifested. Cause and effect are inseparable ideas. Everything that is in the effect is in the cause, and vice versa. As for man, he is essentially mind. But besides the individual mind, there is also the objective mind, or society, and, as the beginning and end of all development, both individual and societal, there is the Absolute Mind. This position of Hegel has been criticised already in Chapters III and VI, both from a metaphysical and an epistemological standpoint.[2]

[1] For a detailed criticism, see the authors cited above in the chapter on the Theory of Knowledge.

[2] Laird, *Problems of the Self*, p. 335. "The Hegelian universal, splendid, active, self-completing, is fitted to arouse admiration in some minds, and something akin to despair in others. But the Absolute is not the human mind, nor the human mind, the Absolute. If the Hegelians are right in contending that substance is too narrow a category to express the nature of mind, we must also remember that they maintain that personality is too narrow for the truth. We may readily admit that, if the Self

Dualistic Realism and the Self.—Dualistic Realism presents a solution of the problem of the Self in terms of the theory that mind is a spiritual substance existing in time, and that because of its nature as a spiritual being, consciousness possesses an essential unity. The Self, according to this philosophy, is a composite of two substances, one material and the other spiritual. Both substances are real, and both possess activities which reflect the nature of these substances. They are not, however, two disparate substances in the sense of Descartes, but act and interact upon each other according to the laws governing the operations of matter and of mind. The Self, therefore, in spite of its composition, presents a substantial unity, the unity of consciousness. Its acts are not the acts solely of one element of the composite, but are all directly referable to the whole, from which they proceed. This statement must not be interpreted as meaning that physiological function, for example, is ultimately reducible to mental function. On the contrary, the body performs actions which are bodily or physical, while the mind is capable of processes which clearly transcend every physiological function. But all acts of whatsoever nature are the products of the Self, and are directly referable to the Self as subject and as cause.

This theory of the Self received its definitive statement in the treatise of Aristotle, *On the Soul*.[1] Mediæval

is substance, its substantiality is not identical with that of a physical thing. And, again, if it is substance, it is not unvariable to the point of tediousness, or barren to the point of simplicity. None the less, the self is substance."

[1] Hoernlé points out its striking resemblances to the position of modern realists. However, the agreement is not so exact as Hoernlé seems to indicate, for Aristotle accepted without reservations not only the doctrine of the substantiality of mind, but its spirituality as well. It is quite true that, like all realists since his day, Aristotle emphasized the functional aspects of mind. "Aristotle's theory of the soul is clearly, in our modern jargon, 'functional' or 'behaviouristic.' In fact, his 'soul' is what we mean by 'behaviour,' especially if we take the latter term in a sense sufficiently wide to include all the rational activities which are specifically human. Some of our modern behaviourists, like E. B. Holt, are fully aware that their theory is a return to Aristotle's position." Hoernlé, *Matter, Life, Mind, and God*, p. 150.

thought developed and clarified the position of the Stagirite, especially in the light of the supreme place accorded human personality by the Christian doctrines of man's immortality and final end. With Descartes began the attacks on the doctrine of a substantial Ego. Locke, Berkeley, and especially Hume, laid the foundations for the critical attitude towards the soul problem. On the Continent, at this period, the conception of mind was avowedly materialistic. Kant attempted to reconcile the conflicting positions of Hume and Berkeley, but only succeeded in arousing a more intense disregard for animism than had existed before his time. Modern philosophy almost gave the deathblow to the soul theory. In spite of the vigorous defense of the older doctrine by such thinkers as McDougall and Bergson, the ground lost has never been entirely recovered. As Professor James remarked, "Souls are out of fashion." "This is where we stand now. The 'soul' (as substance) is gone. 'Consciousness' if not going, is threatened. Between the 'unconscious' of the psycho-analysts and the 'behaviour' of the behaviourists, what is the outlook for psychology? Can we discern anywhere the promise of a movement towards synopsis?" [1]

The promise looks bright. The soul theory, if correctly stated, can be defended on philosophical, psychological, and biological grounds. The greatest obstacle to its acceptance to-day is the mass of misunderstanding, misrepresentation, and even prejudice, which has grown up during three centuries of philosophical controversy about the idea. Many, too, rebel against animism because they dislike the supposed theological implications imbedded in or associated with the term. The realist, however, is not so enamored of words that he need insist on the term "soul" to the exclusion of every other or a better word. If the concept of mind-

[1] Hoernlé, *Matter, Life, Mind, and God*, p. 153.

substance is preserved in its entirety, he would be quite willing to make any verbal sacrifice that modern sensibilities and prejudices demand. Truth is not now, and never has been, a matter of mere words.

Arguments in Favor of Dualistic Realism.—There is no need to repeat here the defense of the nature of substance or of the theory of interaction as explanatory of the relations between body and mind, which we have already made.[1] That substance is a valid category appears to us undeniable. If we define it as it should be defined, as that which exists in itself, and not as a mere inert substrate, support, or ground upon which accidents appear,[2] as it is so often misrepresented, the value of the substance-concept for philosophy is beyond question. Now, a substance is ultimate. Every kind of reality must be either substance or accident, for there is no middle ground. An infinite series of accidents is plainly impossible. Sometime, somewhere, we must come to a subject which exists *per se*, that is, to a substance. Moreover, if a substance may exist, no one can deny that it is capable of acting. That substances do act is a matter of everyday experience, and by their actions substances make their nature known to us.

The following reasons justify us in our belief that the mind is a substance. In the first place, consciousness testifies in unmistakable terms to the fact that we think, feel, remember, etc. Now, what is the subject of these thoughts and feelings? It is either a substance or our mental processes are accidents, in which case they demand a subject, for the very nature of an accident is to inhere in a subject. In both cases, therefore, we must conclude to the existence of a mind-substance. A word of explanation will

[1] Cf. above, pp. 94–101.
[2] Coffey, *Ontology*, pp. 225 et seq.

make this clear. What do we mean when we use the terms, thought, feeling, memory? We infer always that some one exists who thinks, who feels, who remembers. It is impossible to conceive such a thing as thought separated from a subject who thinks. Therefore, there can be no mental activity without a mind-substance, the source and subject of this action. Nor does the present-day psychologist make more clear our ideas of the mind as subject by describing mental activity in the terms of mental chemistry, stream of thought theory, or by comparing the unity of consciousness to the unity of a plant. Such descriptions are wholly fanciful. Professor James himself pointed out the absurdities of such "integrating and gumming" of thoughts as a picture of the unity of consciousness, and concluded that "all the incomprehensibilities which we saw to attach to the idea of things fusing without a *medium* apply to the empiricist description of personal identity." [1]

Consciousness testifies in clear terms, therefore, to the identity of the I who thinks with the I who feels or remembers or performs any other action. Of my own reality and of the reality of my thoughts there can be no question. I think, I know that I think, I know that I am the cause of my thoughts. If all this be but an illusion, assuredly there can be nothing in this universe of which man may be certain.[2]

Again, no one questions the fact that the mind, in its states, presents to our consideration a remarkable example of change. It is this characteristic of our mental processes which the empiricists seize upon and from which they wrongly conclude that the mind must be identical with its states. On the contrary, the changes are very small and gradual. They can and do exist without destroying

[1] *Principles of Psychology*, Vol. I, p. 338.

[2] On the consciousness of identity, consult Ladd, *Philosophy of Mind*, pp. 148–208; McDougall, *Body and Mind*, pp. 281–300; Laird, *Problems of the Self*, pp. 337–370; Lotze, *Metaphysic*, edited by Bosanquet, Vol. II, pp. 169 et seq.

the mind. "There is no reason why the mere fact of change should be a bar to identity. . . . A substance has all its qualities which it possesses *at any time during its existence*, but it cannot have them altogether. A thing is or is not the same, according to the unity and continuity of properties which it has at any one time and at any other." [1] A substance is not merely the composite of all its attributes, neither does it of itself entail the idea of permanence amidst change. As a matter of fact, the mind-substance does thus endure, and if it can be proved that such permanence is a characteristic of mind, its claim to being acknowledged as a substance is doubly reinforced.

The proof of the abiding identity of mind, in spite of the constant modifications of which it is the subject, is a psychological one. Introspection points out the endless changing of our mental states. The processes of mind are in a constant state of becoming. Thoughts, feelings, sensations follow one another in endless series. However, we are assuredly conscious, by contrast, that an Ego persists amidst all these fleeting modifications; in a word, the consciousness of personal identity never leaves us, no matter how numerous or how sudden the mental changes may be. Each man adverts to the changes which take place in himself. Very often we hear a man say that he is "completely changed." Such comparisons are plainly unintelligible unless a certain standard is recognized according to which we can estimate the amount of change. "This consciousness of being 'the subject of change,'—for it is *I*, and *not another*, that am changed—involves the consciousness of identity in such manner that the two cannot be divorced." [2]

By repeated acts of reflection, all men form a more or less exact picture of what personal identity means. This iden-

[1] Laird, *Problems of the Self*, pp. 350–351.
[2] Ladd, *Philosophy of Mind*, p. 157,

tity of the Self becomes particularly obvious [1] when I turn over past acts in my mind, reconstruct them, and identify them, as I often do, with myself. I am no less certain that I actually performed an act yesterday than that I did the same act countless times before, or experienced similar sensations and feelings. These marks of similarity between my present and my past experiences point unerringly to the necessary identification of my present self with my past self. I may be deceived in this conclusion, but no one can question the logic by which both reason and memory lead me to such an opinion. Consciousness, therefore, is a unit, and the unity of consciousness would be impossible on any other assumption than that, as a substance and being, the mind is a unit too. This is the only satisfactory theory at hand, despite the obvious dualism which it entails. To contend that psychology would be better off by interpreting mind exclusively in terms of its own states, or, what is the same thing, in terms of behavior, is to close the doors forever to a possible and complete understanding of what our mental life actually is.[2]

The sense of moral responsibility with which every man is endowed is possible only on the assumption that the I is an abiding subject, responsible for its successive acts. Not only is every act of volition an indivisible act and, therefore,

[1] This argument, it may be pointed out, does not assume nor require that the consciousness of Self as a unity be present in every mental state. As Lotze points out: "Our belief in the soul's unity rests not on our appearing to ourselves such a unity, but in our being able to appear to ourselves at all. . . . What a being appears to itself to be, is not the important point; if it can appear anyhow to itself, or other things to it, it must be capable of unifying manifold phenomena in an absolute indivisibility of its nature." *Metaphysic*, Vol. II, Bk. III, Chap. I. See also, *Microcosmus*, trans. Hamilton and Jones, Bk. II, Chap. I.

[2] Every one is acquainted with Taine's view of mind as the "permanent possibility of sensation." If this phrase has any meaning at all, it can only mean that in nature there exists an abiding subject, capable of doing all that is necessary, given the required conditions, to produce sensations. This "permanent possibility," therefore, is nothing but the Self which remains unchanged, despite the ephemeral sensations to which it is subject.

incapable of proceeding from a series of distinct states or principles, but unless this were so the whole conception of moral duty and the individual's responsibility for his own acts would fall to the ground. An analysis of volition shows conclusively that the unity of consciousness manifested in acts of the intellect is no less a necessary and prominent note of volitional than it is of intellectual activity.[1]

To many the metaphysical and psychological arguments in favor of the substantiality of mind are not altogether convincing. These thinkers demand an explanation of consciousness in physiological terms, or, at least, a proof that its unity and continuity cannot be explained adequately, as has been so often attempted of late, by the permanence and stability of the brain-substance. Here we need not go over again the ground so well traversed by McDougall in his *Body and Mind*.[2] His conclusion, however, may be quoted. "The demonstration that the fusion of effects of simultaneous sensory stimuli does not take place in the nervous system thus forces upon us the problem of the ground of the unity of individual consciousness in a form which brings out clearly the impossibility of finding any solution compatible with the fundamental assumption of all forms of Parallelism; and it forces us to choose between adopting the plain and straightforward solution offered by Animism and leaving this fundamental fact utterly mysterious and unintelligible. The issue is simple and direct."[3] Again, "the facts of the relation of sensory consciousness to cerebral events thus render the conception of a unitary psychic being, call it soul or what you will, a

[1] For an exposition of the place which unity and continuity hold in the affective side of consciousness, see Laird, *Problems of the Self*, pp. 237 et seq.

[2] We advise the student to read the chapters, "The Unity of Consciousness"; "The Psycho-physics of Meaning"; "Pleasure, Pain and Conation"; "Memory," pp. 281–346, in that work.

[3] *Body and Mind*, p. 297.

necessary hypothesis; for the rejection of this hypothesis involves either Pyrrhonism or the acceptance of a confused tangle of obscure conceptions (conceptions of fantastic entities such as the 'threshold of consciousness,' or unattached fragments of consciousness, sensations flying about loose and coming together to yield up their own natures in creating new entities), and, even if the prejudice against the conception of the soul is so strong as to lead one to prefer to it this tangle of fantastic ideas, this still proves to be inconsistent with the fundamental principles of Parallelism." [1]

The Spirituality of Mind.—From what has been said, we feel justified in concluding that the mind should be regarded as one. What this unity means, when applied to the soul, can only be learned from the deliverances of the mind itself in terms of self-consciousness. A great many experience difficulty in imagining how a being, endowed with so many and different functions as consciousness undoubtedly is, can be a unit. Such multiplicity of function, however, only seems to make more evident the mind's unity, since in the acts of mind every function, intellectual or volitional, either actually engages or is latent. Moreover, the mind's unity would not be made more clear supposing, for example, it were the subject of a single unchanging state. Its very nature is to change. Self-consciousness is essentially a process of becoming. If it were not dynamic, as it unquestionably is, we would never be able to conclude to its essential unity. While different from material substances in this, that its unity is not the result of a combination of distinct parts, yet it is a unity in the higher sense of the word, in fact, it is a unit substance in the most fundamental meaning of the term. Experiences come and go,

[1] Op. cit., p. 299.

but experiences could not even exist unless a permanent subject already existed and continues to exist after they have disappeared. The soul, therefore, is a substance in the best sense of the word. It is a substance in the generic sense like every other substance in this universe. It differs from all others in this, that it is both a simple and a spiritual, that is to say, a very distinctive kind of substance. But because the mind is not a material substance is no reason for denying that it is a substance.

The notes of mind-substance which transcend all others are its simplicity and spirituality. The acceptance of the attribute of simplicity leads us logically to the affirmation that the mind is a spiritual entity, in other words, that both for its existence, and, up to a certain point, for its activities, it is not dependent on matter. The proposition is one which every one who accepts the doctrine of the mind's substantiality will readily concur in. The arguments consist in a review and a delineation of the nature of the activities of the mind-substance in order to point out their essentially spiritual character, from which facts it is but one step to the conclusion that the subject of such spiritual acts must itself be spiritual. The validity of this reasoning must be altogether convincing to every man. It is unthinkable that the soul should possess functions, which can be shown to be quite independent of any material organ, unless it itself were spiritual.[1]

In the first place, physiological psychology has demonstrated clearly that for all sensations a certain definite time for recovery from the effect of a stimulus, especially if it be very strong, is required before the sense in question can perceive another stimulus, even of a weak intensity.[2] But

[1] For these arguments, see Mercier, *Psychologie*, Vol. II, pp. 248–262.

[2] For a detailed statement of recovery time, due to the inertia of the nervous system, consult Ladd, *Elements of Physiological Psychology*, pp. 472 et seq.

the intellect is not handicapped in this way. It experiences no fatigue or difficulty in passing from a concept of the most abstract character to a truth which is simple and known to all. From which observation it follows that sensitive and intellectual operations are conditioned in widely diverse ways. Sensation is a product of the sense organs and the brain, which are material; thought, on the other hand, is a function which acts in independence of any physical organ.

The abstract character of thought demonstrates clearly the spiritual nature of mind. Thought is not something which exists anywhere in nature. It exists in the human mind, is an immediate act, and is therefore a modification of the mind which knows. If thought, viewed objectively, presents spiritual characteristics, we must conclude that the subject of thought is likewise spiritual. What then of the thought-object itself? That we possess universal ideas, such as humanity, the League of Nations, justice, etc., is beyond all question. Moreover, the mind thinks such abstract thoughts as God, it formulates the necessary truths of logic and of being, it understands and accepts the axioms of mathematics, it examines the infinite possibilities of act or of being, it perceives the relations, both general and specific, which exist between our ideas, and, above all, it reasons, and correctly, from given premises to certain conclusions. There is no need to contrast at length these deliverances of the mind with the concrete products of sensation. It is evident at first glance that an unbridgeable gap separates the two kinds of activities. That the brain, concrete and individual as it is, is quite incapable of such functions, both reason and physiology demonstrate. For what is the brain? Simply a mass of chemical atoms at any given moment combined in certain precise proportions. Shall we conclude that this organ is capable of producing such

acts as reasoning and judgment which clearly transcend the sensible, or that knowledge can be explained to our complete satisfaction in terms of cerebral physiology? We can do so only by bidding defiance to all logic and observation. [1]

Again, the power of reflection, by which the mind turns back both upon its own acts and even upon itself, indicates a type of mental function which is wholly supra-sensible. Consciousness not only thinks thoughts, but it can think of its own thoughts. This study of our own states, in which we compare them with our previous mental states, recognize them as having belonged to us at some time in the past, and conclude to the identity of the I now thinking with the I who thought years ago, can find no rational explanation outside of the assumption that thought is the product of a faculty essentially spiritual. Of particular significance is the act of self-consciousness, which entails the tremendous function in which the mind literally turns back upon itself. In this case, the Self is both subject and object, the mind thinking, and the thought thought about. Does matter ever act thus upon itself? A part of one body can act upon another and a different part, but no body has ever yet succeeded in acting upon itself. The conclusion is obvious.

Furthermore, the spirituality of mind is a logical conclusion from an analysis of the functions of will. That the will is free, we have already attempted to prove. In such case it is evident that will cannot be explained in purely mechanical terms. If we are free, then we necessarily determine, under certain limitations and conditions already pointed out, what we shall do and how we shall act. Self-determination, however, is beyond the power of any and every purely physical being. Nor need we insist again upon the fact that the very validity of all our conceptions of moral obliga-

[1] Ladd, *Philosophy of Mind*, pp. 396–412.

tion and moral duty depends upon accepting the doctrine of moral freedom. The moral life of man is so intimately bound up with the question of his freedom that their union must be looked upon as indissoluble, if we wish to save either notion from complete destruction.

Or, to look at this question from another angle. The will desires the good, not any particular good, but good in the most abstract and universal sense of the term. The moral history of man proves that he has always sought after the best, that he has loved justice and hated iniquity, that he has never been satisfied completely until he has done the right simply for the reason that it is right. What can all this striving after righteousness, this search for the highest moral good mean except that the will of man is not tied down to individual sensible purposes and desires? The animal desires nothing but its pleasure of the moment, or to avoid an unnecessary pain. Man's aspirations, on the other hand, are infinite and find their end and satisfaction only in Him Who is the alpha and omega of all things.

Criticism of the Soul Theory.—On no other philosophical doctrine has such widespread and terrific assaults been made as on the belief in a soul. And so successful have these objections been that the majority of psychologists to-day are convinced anti-animists to such an extent that they appear even unwilling to entertain the possibility of an argument favorable to the mind-substance theory. The modern mind is tormented by many prejudices. There are few comparable in strength and tenacity to what might be called the "soul complex."

The objections to the soul theory from "inconceivability," evolution, and the law of the conservation of energy have been examined in another place.[1] We refer the

[1] See supra, pp. 102–105.

student to the answers given there. Here we shall examine only the objections of a philosophical tenor ordinarily brought against the thesis we have been defending.

Psychologists tell us that the soul idea is meaningless, that psychology can and does get along very well without accepting a doctrine which involves such a strain upon our reasoning powers. Moreover, modern psychology, whether introspective or experimental, has made the most marvelous advances in spite of the fact that it refuses to believe in the reality of the soul. To which we might reply that if modern psychology is thoroughly satisfied with its various, and be it said often conflicting theories of the mind, then there is no place for the soul. But this is the whole question under dispute, and it assuredly is not settled by assuming as true the very point at issue. There are some psychologists, and their number is on the increase, who are not at all satisfied with the associationist, stream of thought, or behaviorist theories. "Psychology without a soul" has accomplished a great deal, be it admitted quite frankly. That it has set up in the place of mind-substance a theory of mind to which both psychologists and philosophers can subscribe, is to make a claim without the slightest vestige of proof. So widespread, in truth, is the dissatisfaction with the assumptions of present-day psychologists, especially those of the behaviorist school, that many thinkers have almost concluded that the only safe classification for modern psychology is to put it alongside of alchemy, astrology, and the countless other pseudo-sciences which have always plagued the human mind. We are not ready to put our name to such a sharp rebuke. However, it must be admitted that the time is here when psychology, if it is to endure, must repudiate its wild escapades of the last half century and settle down to the even tenor of a life, bounded

by facts and hedged in, if you will, by respect for the truth, come what may.[1]

A favorite objection of the function psychologists may be stated thus. The soul idea, even though it were true, is "useless." Given the brain, thought of necessity follows. We add nothing to our understanding of brain processes by saying that beneath these processes the soul exists as a sort of ground or subject for the same. As James puts it, "We ought certainly to admit that there is more than the bare fact of coexistence of a passing thought with a passing brain-state. But we do not answer the question 'what is that more?' when we say that it is a 'soul' which the brain-state affects. This kind of more *explains* nothing." [2]

Professor James, in this objection, misstates, we think, the whole question. It is not a problem of the soul explaining how thought and brain-state act and interact upon each other. The problem is, how can you explain the evident unity of consciousness which exists, despite the fact that at every moment of our waking lives change is taking place in our mental states? The soul explains this unity, how it is that our present thoughts are the thoughts of one who has before experienced similar thoughts. The whole raison d'être of the spiritual theory of the self is to explain this unity amidst diversity. In no sense of the word is the soul set up as an explaining cause of the relations which exist between brain and mind. Moreover, if our mental states did not inhere in some subject, how could they

[1] Laird states this argument in a somewhat different manner. "I do not wish, in this place, to defend the theory of psychology without a soul. On that point, indeed, I find myself in substantial agreement with Husserl: 'The attempt to defend a psychology without a soul, corresponds to the theory of a science of nature without bodies. The first theory speaks of a psychology which abjures every metaphysical assumption with regard to the soul; the second rejects in advance every theory that touches the metaphysical nature of the physical world.'" In both cases, as is evident, the theory spells the bankruptcy of science.—*Problems of the Self*, p. 40.

[2] *Principles of Psychology*, Vol. I., p. 346.

possibly exist? It is all very well for the experimentalist to turn his back on the problem and say that it is the thoughts alone which interest him. "As psychologists," writes James, "we need not be metaphysical at all. There is, and can be no compulsion for the empiricist to admit the existence of a soul." This is a position, however, which in stubbornness and stupidity surpasses that proverbially taken by the ox.

Neither can we agree with the statement that the very concept of the soul is an empty one. On the contrary, it implies certain characteristics of most far-reaching significance. The positive content of the term "soul" only comes to us after a detailed and thorough examination of all the activities of mind. It thus sums up in itself and connotes such things as substantiality, spirituality, individuality, unity, permanence amidst change, the subject of intellectual, volitional, and sensation activities, the source and ground of all life activities—assuredly these *are not* mere negative concepts or illusory terms.[1]

Another objection, epistemological in tone, is derived from the fact that we have no immediate experience of the soul, its existence is the result of inference. But we know from experience itself what consciousness is. We are not justified, therefore, in assigning a higher grade of reality to the soul than we do to its activities.[2] This objection is based on the assumption, altogether false, that the sensible and knowable are coterminous, or that sensible knowledge possesses more cogency than intellectual knowledge. No one but a convinced positivist would subscribe to such an epistemology. Moreover, it supposes that the soul and consciousness stand out, as it were, in contrast to one

[1] For a reply to the contention of James that the argument from the freedom of the will is not convincing except to those who already believe in a soul, see Maher, *Psychology*, p. 484.

[2] McDougall, *Body and Mind*, p. 123.

another, the soul, a dark unknowable thing; consciousness, clear and understandable as the meridian sun. Such a description of the soul is burlesque pure and simple. The soul cannot be separated from its activities, just as we cannot have the activities without a soul. Neither can the soul continue in existence if consciousness ceases to exist, and vice versa. Of course, no theory should hope to escape misrepresentation. But the pass to which some modern thinkers go in building up a straw man which they call the "soul" is unequaled, we think, in the whole history of controversial thought.

Finally, a word may be said about the substitute for the individual soul which is manufactured by certain psychologists who, like James, become "at times metaphysical." These thinkers find some solace in the theory of a world soul which lies back of and seeps through, as it were, all our thinking. That the world soul cannot hope to usurp the place of the individual soul is evident from a moment's consideration. For such a concept involves all the difficulties involved in the acceptance of an individual soul and possesses few, if any, of its advantages. In the first place, it is a purely a priori theory with scarcely a shred of evidence to back it up. Built up on a parity, namely, that since consciousness points to the existence of a soul in ourselves, so also the world may possess one, the whole analogy falls like a house of cards to the ground, when one reflects that between the human living organism and the so-called organic unity of nature, there exist differences no less wide than they are fundamental. Any comparison of man with the universe can only be of the most shadowy and unconvincing kind, a fit subject perhaps for poets and dreamers, but quite without the pale of the rigidly scientific thought which is supposed to characterize a philosopher.

Furthermore, the very concept of a world soul is self-con-

tradictory, incapable of being stated in rational terms, replete with assumptions which demand an unusual amount of credulousness on our part, and finally, pantheistic, both in tone and in its consequences. We have examined the claims of pantheism already and have found them unacceptable from a metaphysical point of view. The psychological formulation of the same theory, in terms of a world soul, has not made the belief in a universal mind any easier to accept.

An examination of modern theories, relative to the nature of the Self, cannot but convince one of their utter inadequacy in the face of the problem as it presents itself to us. To translate mental function into behavioristic terms is not to clarify the difficulties inherent in the problems which revolve about the Self, but to make more unintelligible the question under discussion. Materialism as metaphysic has been recognized for a long time to be a decided failure. Materialism disguised in its present-day psychological forms, as associationism, epiphenomenism, parallelism, or behaviorism, has not had any greater success than the older theories which frankly believed in thought as a function of the brain. The advance in philosophical thought during the last quarter of a century has brought out nothing more clearly than the fact that no reliance can be placed on Materialism, either in its liberal or reactionary forms, to solve the problems which turn about man, the nature of the Self, and the place of human personality in the universe. As a matter of fact, these problems do not and cannot exist for any form of Materialism, since it denies the very existence of the problem itself and views it much in the light of a nonsense question.

Idealism is not burdened with the insuperable difficulties which a materialistic psychology must face. For the idealist, thought, at least, is a reality, if it be not the whole of

reality. But in this, Idealism goes to the other extreme. By denying the existence of matter it erects a formidable barrier to a complete understanding of the Self. It calls upon us to deny existence to something of whose reality we are completely convinced, namely, our own bodies. And its insistence on the reality of mind does not compensate us for the sacrifice we are asked to make by refusing to acknowledge the actuality, or, at least, that we can have a knowledge of matter and its properties. Founded on a false, one-sided psychology and epistemology, it is no wonder that the idealistic conception of the Self is one which, for many reasons, is altogether unacceptable.

Realism presents a synthesis of the materialistic and spiritualistic conceptions of reality which, if correctly expressed, can scarcely fail to attract our support. But it is only in a dualistic formulation of the principles of Realism that we shall find a true statement of the philosophy of the Self. Dualistic Realism views the Self as a composite—partly material, partly spiritual. The body is matter, mind is spirit. Mind depends upon body, but the dependence is a purely extrinsic one. The soul vivifies and vitalizes every operation of the composite. It possesses, however, functions of its own which no physical being can possess. The soul is a substance, which is spiritual, simple, and, by consequence, immortal.

Dualistic Realism, therefore, preserves for philosophy both the reality of the body and the reality of mind. It does not submerge the mental in the bodily, nor does it do away with the independent reality of the Self, as every form of idealistic monism must do. Accordingly, it offers an explanation of the Self which harmonizes with reality as we know it, which gives to human personality the place it deserves in the hierarchy of nature, and which saves for morality the only sanction that will bestow validity upon

its obligations and, for the human individual, the only kind of immortality worth having, that of the spiritual Self.

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CHAPTER XI

PHILOSOPHY, SCIENCE, AND RELIGION

Few problems are more vexing or have divided thinkers more sharply in recent years, than the problem of the nature of science and of philosophy, and of what should be their relations to each other. To the man in the street nothing seems more obvious than that science and philosophy, as he is acquainted with them, present very clear-cut lines of division. He is more than apt to look upon science as a subject which deals with truths of undisputed validity. The great, almost awe-compelling achievements of modern science are well known to him. He reads daily of some new and more wonderful discovery; he experiences in his home, the factory, shop, or office the practical value of scientific research in terms of increased industrial efficiency, or of added human comfort; he is acquainted with the airplane, the automobile, the submarine, the X-ray, the radiophone, and comes quite naturally to the conclusion that science is all-powerful, that no one in sane mind can question either the truth or utility of the principles which underlie such astounding accomplishments. At least to that part of philosophy which touches closely his daily life, he is apt to give a more or less unqualified assent. However, when we penetrate the farther reaches of philosophical thought, and endeavor to explain its more abstruse problems, he begins to lose patience with such questions because of their supposedly impractical character. The contrast between the

results of modern science and those of philosophy, both pure and applied, reacts to the disadvantage of the latter.

The problem, as it unfolds itself before the plain man, is fundamentally the same problem which agitates opposing camps of scientists and philosophers. Stripped of popular errors and crudities, the ordinary view becomes the view of those thinkers who look upon science as the sole source of truth, as the fountain head of knowledge in the strict sense of the word. With great dexterity and a formidable mass of concrete achievements, science is paraded before us, fact after fact marshaled in battle array, theory after theory backed up by facts. In striking contrast is the disorderly appearance of philosophy. Here fact jostles theory, one theory contradicts another, personal opinion vies with personal opinion, and instead of presenting an aspect of unity, philosophy seems nothing more than a confusing picture of the many disagreements which have, from the beginning of history, divided philosophers amongst themselves.

Philosophy, we are told, has been hampered too long by the shackles of a false method. Particularly harmful to the progress of philosophical insight has been the centuries-old domination of religious and ethical motives. Science shook off both these incumbrances over two hundred years ago. Since that time its history has been but the recital of one marvelous discovery after another. Philosophy, if it would go forward, must divorce itself likewise from these hindrances of the past. It must turn to science where it will find both a guide and the inspiration necessary to achieve that for which mankind has been waiting so long and so expectantly. What these thinkers ask, in a few words, is that philosophy become science, in the sense not only that it base its explanations upon the *results* achieved by science, but that it adopt, with the necessary changes, the *methods* of science. As Hoernlé remarks, "It is a tempting sugges-

tion. We hardly know how to resist it, for the spell of science is upon us all."[1]

But there are thinkers who resist the temptation, strong as it is. They admit, and quite readily, that science has gained notable triumphs, that scientific method is for science the only practicable method, but they are very adverse to the statement of philosophical problems in terms solely of science, or to a narrowing of philosophical method to the single method of experiment. For the true philosopher there is something more than a question of method involved in this controversy. Beneath the assumption that scientific method, in the narrow sense of the word, will alone produce noteworthy results, is that more fundamental and more far-reaching assumption that the only kind of knowledge worthy the name is that which is acquired experimentally. To accept such a proposition would entail a limiting of the subject-matter which philosophy now treats to the field of phenomena observable by the senses. This in itself is a philosophical position, that of Positivism, and cannot be accepted until after it has been most seriously examined and evaluated.

Realists have attempted, at all times, to avoid the extremes inherent in an exclusive acceptation of either the position of those who rely solely on the analytic method or of those who tie themselves down to the method of a priori speculation. Either of these methods, taken singly, is inadequate and false. A synthesis of them, however, can be made. Aristotle succeeded in formulating a synthetic philosophy; likewise, Thomas Aquinas in the Middle Ages. Modern realists, except those of the monistic school, have all felt that such a synthesis is not only possible, but that its actualization is much nearer to us than our critics in the field of science are willing to admit.

[1] *Studies in Contemporary Metaphysics*, p. 29.

Philosophy, in this viewpoint, must not be looked upon as synonymous with science, neither is it true that science is nothing and philosophy everything. There is a middle road which leads to a synthesis of the results of all the sciences with the formal principles which underlie them in a philosophical construction, whose fundamental purpose is to study these facts and principles of science in their highest and most ultimate aspects. Both science and philosophy study the same facts. The difference is one of approach, since science is concerned with secondary causes, while philosophy pushes its investigations to the last causes determining all things.

Now, to return to our problem. The aim of philosophy is to know. Knowledge is likewise the aim of science. Does it then follow that science is philosophy, or that philosophy is science? If they are not the same, which should have precedence over the other? Perhaps we must look upon science as autonomous, the principles of which must be regarded as totally independent of philosophy. Or possibly philosophy is the more fundamental, because the principles of all knowledge, including science, depend in a most direct fashion upon the principles of metaphysics. If neither of these positions be acceptable, what possible answer can be given to the problem of the nature of philosophy and of its relations to science?

In order to answer these questions adequately, it will be necessary to investigate somewhat in detail both the nature of science and of philosophy, as well as the functions and limitations of each of these disciplines. From this investigation it shall result that a satisfactory reply to the questions can be given, and that a workable systematization of the functions and purposes of both science and philosophy follows upon a correct view of what these two approaches to knowledge essentially imply.

The contending claims of science and philosophy in the field of human knowledge did not disturb ancient thought, which generally looked upon science as a mere branch of philosophy. Of the Greek thinkers, Aristotle saw best that a problem was involved in the relations of the two. Aristotle, as is well known, was both scientist and philosopher, and succeeded in laying the foundations for a conception of the place of science in philosophy which harmonizes very well with the aims and purposes of both.

In modern times, Descartes gave the question new life by asserting that the principles of the special sciences should be directly subordinated to those of philosophy. This view strongly influenced subsequent thinkers, especially those of an ethical or a religious bent. On the other hand, Locke and Hume disagreed with this view and laid great emphasis on the strictly scientific aspects of philosophy. This latter tradition reached its fulness of expression in the philosophy of Positivism, the underlying concept of which is that each science is autonomous in its own field and must not be subordinated to philosophy as to a "*scientia rectrix.*"

Contemporary opinion favoring the supremacy of the experimental view of philosophy is expressed by the theories of Bertrand Russell and John Dewey. For Russell, since science manifests itself best in the mathematical sciences, philosophy must have recourse to this particular method if it would succeed. Now, mathematics has a close affinity with logic, to which it can be reduced. The method which philosophy should employ, therefore, is the "logico-analytic." We thus return to the deductive method which played such a prominent part in the philosophical speculations of the early modern thinkers of the mathematical school. Dewey, on the other hand, makes laboratory science the ideal means of attaining knowledge. All thinking is but

an instrument in our progress towards truth. But the only kind of thinking of value is that which is of an experimental character. It is solely by experiencing, by trying out ideas that we learn their value. Results thus attained are the only genuine test of the truth of our concepts. This view is known as the philosophy of "*Instrumentalism.*"

Finally, the position of those who advocate what might be called the "analytico-synthetic" view describe science as a particular field of knowledge of which philosophy is the end and crown. Neither analysis nor synthesis must be overlooked in our search for truth. The final emphasis, however, must be placed upon synthesis. From the side of the matter treated, both philosophy and science go over the same ground. The fundamental difference between the two is the manner of approach to the problems considered. Science confines its investigations to secondary causes; philosophy, accepting these results, passes on to the consideration of the ultimate causes underlying all the phenomena of being and of thought. It is, therefore, not merely a science, but the science of sciences.

The Nature of Science.—The word *Science*, like Philosophy and many other kindred abstract terms, has been almost personified by popular usage. We talk of Science, capitalized, and forget that there is no such thing. There are sciences, the mathematical and physical sciences, but there is no Science. In the same way, one speaks of scientific method and of the progress of scientific thought, when it is a well-known fact that a single method applicable to all the sciences does not exist, and its very possibility is a matter for grave questioning. Unless, therefore, we state with exactness what is the meaning of the terms used in this discussion, nothing but confusion of thought and harmful antagonisms shall result from our investigations.

A short analysis of the characteristics of science will make evident its nature. Science is knowledge by description, and this knowledge comes to us by means of observation and experiment. Now, scientific demonstration presupposes definite and fixed conditions from which, when verified, truth results. The results of this demonstration are expressed in a scientific formula which is something more than the mere record of the experiences of the individual investigator. A scientific formula or generalization represents a truth which can be verified by any investigator, and therefore presents an undeniable case where our thoughts about nature represent truly what is taking place in nature itself. Science, therefore, relies upon facts, and the explanation which it offers of these facts is sound, convincing, and decisive.

The method employed by Science is that of verification of sensible phenomena by means of laboratory investigation. These phenomena, because of their sensible nature, leave themselves open to investigation by means of the exact and rigorous methods peculiar to each one of the special sciences. The world of phenomena external to the mind is such that it can be reached and tested in a way which produces results whose truth is not open to question. The study of nature, therefore, occupies a much more advantageous position than does the study of mind. And the concrete character and practical value of the results obtained by scientific method are thus very apt to prejudice one in his conception of the place which must be accorded scientific truth in the general hierarchy of human knowledge. Science is praised for its treatment of fact and the practical uses to which it puts its theories, based as they are upon fact. From this position it is but one step to the assertion that scientific truth alone is of value, and that if we are ever to progress to a complete and satisfactory view

of the world, we must begin and end in the study of facts by way of scientific method.

On the other hand, however, it is assumed, not proved, that the only verification worthy of the name is that obtainable by laboratory methods, and that the only facts worthy of investigation are the objects of sense perception, what Russell calls "hard data" as distinguished from the "soft data" which come to us in any other way. It is not true, of course, that the only facts are those of the sensible order,[1] those which we can see, hear, or touch. There are other facts, facts of the intellectual order whose existence is as sure as those brought to us by perception. Now, if such facts exist, certainly we can assure ourselves of their reality, we can describe them, mark off their characteristics, and discover the laws under which they appear and which determine their nature. Scientific demonstration is practicable wherever we deal with facts. The world of mind, therefore, fulfills the conditions required for scientific investigation. No one can deny that in this field the facts are most difficult to express and to study, or that the ordinary instruments of the laboratory are practically valueless in making known their nature. But that there are facts which cannot be weighed and measured will cause neither surprise nor chagrin except to him who has already made a veritable idol of the methods and results of experimental science. In the field of mind, the results of our study, if scientifically pursued, may be quite as true and quite as certain as any expressed in purely mathematical formulas. The essence of scientific demonstration and verification lies in this, it analyzes facts; whether these facts be of the sensible or intellectual order is a matter of pure indifference. To narrow the extension of scientific proof solely to facts perceived by our senses is unwarranted on any grounds,

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 72 et seq.

and can but eventuate in a view of the cosmos which is at once narrow, and to that extent, at least, false.

Conceding that there exist facts which cannot be studied by the experimental method, it cannot be denied that little progress has been made in the direction of understanding and formulating them into an acceptable system. In this respect, at least, the procedure and results of science are in marked contrast to the shifting opinions which pass muster as the beliefs of philosophy. Below we shall deal somewhat in detail with the question of progress in philosophical thought and of the fixity of philosophical principles. Here we wish to point out that the vaunted stability of both scientific method and achievements is much exaggerated, to put it mildly. The moment we pass from the most elementary conceptions of science, or attempt to define more exactly those accepted elementary notions, we enter upon a region where the disputes which divide scientists are so numerous and so vigorous as to shake our very faith in the stable character of even the supposedly exact sciences, like mathematics and physics. The revolution which has recently taken place in the field of physics, led by Einstein and the defenders of relativity, and which threatens to overturn all our conceptions of the phenomenal universe as built up on the investigations of Newton and his successors, is one, but a sufficient example to serve as a warning to those who attempt to decry philosophy by exalting the positive character of the sciences.

There is fixity in philosophy. This quality of permanence in philosophy is not so evident as that which exists in the sciences. The constant movement in philosophical thought often deceives us, and we conclude that change is more characteristic of it than stability. However, we must not forget that philosophy touches the most elementary things, both in life and in thought. It is about these basic princi-

ples that human speculation runs rife and often presents a series of results which have all the appearance of mere theory, and in which the personal equation seems to predominate. A sane, impartial view of the achievements of both science and philosophy, however, reveals in both realms stability and impersonality to a marked, though not an equal degree. It is not only science which produces positive results. Philosophy, too, is based on positive facts and leads to positive results by means of positive methods. In the world of speculation, the positive exists and can be demonstrated. And the term "positive science" can be restricted to the physical sciences only by assuming that they alone are capable of arriving at positive results. That is an assumption which cannot be proved either a priori or a posteriori.

Science and Determinism.—The advocates of science will tell us here that we have missed the whole point of their contention. It is not so much that they wish to deny that philosophy deals with facts. That may be admitted readily enough. Philosophy does not, however, deal with facts in a scientific manner. For what is the essence of scientific method? It is found in Determinism.[1] A fact is determined in this, that being a consequent, it has in its antecedent a sufficient and indispensable condition for its own existence. Scientific causality consists precisely in that uniformity of succession which is found in every experience wherein the problem of the existence and the nature of an effect are involved. Every effect must have a sufficient cause. To know the effect one must know the cause. From this knowledge of causality we proceed not only to a scientific generalization, but to the power of predicting what must inevitably happen, given such a cause.

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 80 et seq.

Science not only explains, it also predicts. It is here precisely that the note of determinism, which is so prominent a characteristic of science, reveals to us the inner nature of science itself. It is here, too, that science differs so radically from philosophy. And nothing but the acceptance of this deterministic viewpoint, not only for astronomy, physics, or biology, but for the universe as a whole, can ever save human knowledge. For beyond the realm of the determined lies nothing but fantasy, dreams, illusions.

No one can question, if the above analysis of the purpose and aims of science be exact, that there is nothing left for philosophy but to submit humbly and to accept its place as the handmaiden of science. If it can become scientific on no other basis than by an unqualified acceptance of determinism, there is an end to philosophy as a separate and distinct intellectual discipline. Philosophers, however, will think twice before subscribing to any such pretensions on the part of science. Philosophy must be scientific, it is agreed, but if it can become so only by accepting consequences which entail signing its own death warrant, then both common sense and ordinary prudence demand a serious inspection of this axiom, generally received amongst scientists, that science and determinism are one and the selfsame thing.

Now, is it true that we can legitimately identify science and determinism in the sense that such a union explains all the facts of nature, or that it is demanded by the very necessities of logic itself? That any scientific explanation is completely satisfactory from every point of view, no one can contend. Science is strictly limited, both in the range of data open to its examination and in the explanations it offers of these data. The greater the scientist, the more freely comes the acknowledgment from him that science, upon many things, has no view at all, for the simple reason

that many things lie entirely outside its range. Even the theories advanced are generally put forward in a tentative manner with the recognition that explanations founded solely on scientific causality may be overthrown at some future date, or that, if they do conquer the assaults of subsequent scientists, they are not by any means the highest and most profound explanations possible. Further questions always remain, and we do not solve them by denying their existence, or by contending that such problems surpass the powers of human knowledge. Therefore, to admit the inadequacy of science in the face of many problems is to proclaim, at the same time, that the pretended equation between science and determinism is not perfect. If it is possible to conceive of problems insoluble by any known means of science, and at the same time to acknowledge that a species of knowledge exists which is capable of attacking such problems, be the attack as weak as it may and its results as unsatisfactory as possible, it follows that the idea of science cannot be restricted to determinism without doing an extreme violence to the cause of truth.

This question of the all-sufficiency of scientific determinism may likewise be approached from the side of fact. Is it true that outside the field of phenomenal fact nothing exists but illusions and fancies? To uphold such a view one must assume that either our means of observation are perfect or that, by means of the laboratory method, it is possible to learn the nature itself of every object. But it is only necessary to state such a pretension in order to recognize its utter futility. The facts of mind, to be concrete, are not mere illusions. That they are as valuable as the facts of the external world can scarcely be doubted. Yet these mental facts cannot be reduced to mere expressions of behavior without doing them an injustice, without destroying the very thing in them which is peculiar and proper, their immanent spir-

itual character. Because inner facts differ from outer facts is no reason to deny their existence, much less to contend that they must be reduced to outer facts before we can possibly understand them. The facts of mind can be read out of the universe of scientific investigation only on the a priori assumption that such facts are not facts at all, but illusions, that scientific determinism must be extended to every realm of being for the simple reason that we wish so to extend it.

Finally, scientific determinism can be accepted as an adequate explanation of the universe only on the added assumption that the phenomenal world is self-sufficient, and that the explanations offered for phenomena exhaust the possibilities of being. However, few scientists will contend that their formulas tell us anything at all about the essence of things. While convinced that these formulas are true as far as they go, that things are determined mechanically and act *as if* the reign of mechanical law is universal, no scientist can assert that such is the undeniable fact, or that at bottom it must be so and cannot be otherwise. Such an assertion would completely transcend the scientific viewpoint which is exclusively phenomenal. On the contrary, his researches lead him to the supposition that beyond the phenomenal extends a realm where every thing is not determined, but where things determine themselves. Nor can he be true to his own mechanism unless he supposes that the series of mechanical results which he studies points unerringly to a higher order from which the mechanical proceeds and for the attainment of whose purposes it exists.

It seems to us, therefore, equally bad science and bad philosophy to contend that the mathematical and physical sciences exhaust the possibilities of science as such. Over and above the so-called natural sciences there exist

other sciences which, both in subject-matter and in method, present a strictly positive character. It is purely arbitrary, in our opinion, to restrict the meaning of the term "science" to those processes of knowledge in which determinism plays the central rôle. Such a procedure can only be justified if we are willing to assume that the particular sciences alone deserve the name Science. Philosophy, it is true, is not an experimental science. But from this admission it does not follow that it is in no true sense of the word a science. If philosophy deals with facts, if it studies them scientifically, if it exhibits all the necessary characteristics which we have come to associate with scientific inquiry, then there is assuredly no reason in the world for denying it a rightful place amongst the sciences, or for refusing to accept its tested conclusions with the same assurance as we do those of the physical or mathematical sciences.

The Instrumentalism of Professor Dewey.—Probably the best expression of the view current in certain circles that philosophy, to be successful, must subordinate itself entirely to experimental science is that of Professor Dewey. Experiment in this theory, however, assumes a much wider meaning than is ordinarily given to that term. Dewey does not confine experiment to the purely physical, but includes the whole field of the moral, the economic, and the social. Human behavior, too, must be studied after methods modeled on those of the experimentalist, if we would understand it thoroughly and aspire to provide for man's progress and well-being.[1]

In criticism of this position of Professor Dewey, it may be pointed out, first of all, that it involves a theory of knowledge which we have already shown to be false.[2] Pragma-

[1] For this theory of Dewey, see *Education and Democracy*, pp. 256–270 and pp. 388–418.

[2] See supra, p. 226 et seq.

tism, or the utility theory, presents a certain aspect of the making of truth which is a faithful enough picture of the psychological processes involved in the attainment of the principles which guide our actions. But it overemphasizes the practical or experimental aspects of the truth relation by insisting that truth is a purely personal affair, a mere guide to action.

Again, it is hopeless, as a general rule, to seek for an experiment which will prove or disprove a given philosophical theory, for "a philosophical theory is rarely such that it can be proved or disproved by some action devised *ad hoc*." [1] And the reason for this is that a philosophical position involves a statement about realities which, because of their intangible nature, cannot be weighed or measured, cannot be tested in the experimental sense of the word. It is useless, if not absurd, for example, to look for a laboratory proof of the falsity of monism or of the truth of realism. Such views, because of their very inclusiveness, transcend any particular experience which we could possibly construct to test their worth. Since they involve a total view of reality, it is manifestly impossible to find their truth or falsehood by means of any individual experiment. But that these positions may be tested by a strictly philosophical method, that is, that they can be proved not to conflict with the accepted results of experiment nor with our individual human experience, is a fact beyond question. Such testing, such experimentation is going on constantly. It is thus that philosophy advances from positions more or less unsound to other positions which convince us of their truth and validity. And this is the only possible way to "make" philosophical truth.

Dewey claims for Instrumentalism this great advantage

[1] Hoernlé, *Studies in Contemporary Metaphysics*, p. 46. Consult pp. 46–49 for his criticism of the Instrumentalism of Dewey.

over previous conceptions of philosophy, namely, that it leads to results which work. Philosophy in the past constantly revolved about the same problems, discussing and rediscussing them, but never attaining certainty. To which we might reply that the very universality of the problems which philosophy discusses makes their reappearance for every generation a foregone conclusion. Each philosopher must think out for himself the answers to the great recurrent problems of philosophy. And since each man's culture and experience are different from that of every other man, so also his understanding of these problems and of the solutions offered for them by bygone sages will be different. This does not mean surely that no progress is being made in the formulation of a total view of reality. Nothing is more certain than that we have made remarkable advances in our views of the universe since the days of Plato. The progress is not so showy, nor has it led to such practical results as have characterized the recent advances in the natural sciences. But for all that, it is progress of a most substantial kind, and signs are not wanting to indicate that we are standing to-day on the threshold of a new era in philosophical speculation, through which can be discerned the outlines of a world-view which, when possessed by us, shall present to the philosopher as stable and positive a character as do the constructions of modern science.

The Logico-Analytic View of Philosophy.—Bertrand Russell thinks that the mathematical, and not the laboratory sciences represent best the scientific method which must be applied to philosophy.[1] This is particularly evi-

[1] For Russell's view, see his *Philosophical Essays*, pp. 59–86; *Mysticism and Logic*, pp. 74–125 and pp. 209–232; *The Problems of Philosophy*, pp. 220–237, and *Our Knowledge of the External World*.

For a criticism, Hoernlé, *Studies in Contemporary Metaphysics*, pp. 34–38, whom I have followed.

dent in the field of logic, to which mathematics can be reduced. Philosophy need not preoccupy itself, as it has in the past, with the results of science. "It is not results, but *methods*, that can be transferred with profit from the sphere of the special sciences to philosophy." [1] Now, a philosophical proposition to be of any value must be general, not in the sense that it represents anything about the "universe," "for there is no such thing as the universe," [2] but in the sense that what it states "may be asserted of each individual thing, such as the propositions of logic." This philosophy he calls "logical atomism" or "absolute pluralism." In the second place, philosophical propositions must be a priori, that is, they must be such "as can be neither proved nor disapproved by empirical evidence." [3] The world of which philosophy treats, therefore, is a purely possible world where truths are eternally true and untouched by either the fluctuations of mind or of matter. Thus, philosophy becomes for all practicable purposes indistinguishable from logic.

Russell illustrates his method by applying it to such problems as those which have arisen as a result of the development of the non-Euclidean geometry, the problem of space, the epistemological problem, and the problem of realism. Thus, for example, in answer to the question whether our perceptions are "real," he replies that if the question is to be intelligible we must acknowledge the existence in this universe of two kinds of objects, real and unreal.[4] He then contends that an object can be real even though it is neither perceived nor perceivable. And his philosophy deals pre-

[1] *Mysticism and Logic*, p. 98.
[2] Op. cit., p. 110.
[3] Op. cit., p. 111.
[4] This is an evident misconception of the whole problem. The distinction is not between real and unreal, but between the real which is perceived and the real which is not perceived,

cisely with this kind of reality, which escapes both physics and the older philosophies. Philosophy, according to Russell, arrives at views which are purely tentative, but in this it closely approaches all the other sciences which claim nothing more than that their results are approximations to the truth.

In criticism of Russell's view it may be said, in the first place, that it involves the acceptance of metaphysical pluralism, which, as we have already pointed out, is an insufficient explanation of the problem of reality.[1]

Again, Russell reads out of the universe the category of values which he claims has no existence therein. Now, this position not only entails a new conception of what problems philosophy can rightly attempt to solve, but assumes that values as such are not a part of the universe at all. To that extent, at least, his philosophy becomes a world-view, the very thing he criticises in his predecessors. Moreover, and this is a most serious objection, his position appears to us to be nothing short of a more or less disguised pessimism, looking on the universe as a grim reality, the meaning and value of which is beyond all human speculation. "*There* lies the real sting of Russell's plea for scientific method. *There* lies his real challenge to all philosophy which, in the hands of the great masters of speculation, has sought to elicit from all the resources of our experience a synthetic vision of the whole, which would justify that deep confidence in the world which is the fruit of religion at its best. It is because of this renunciation that no thorough-going philosophy can, in the end, find salvation by any method which is scientific in the spirit of Russell's utterances." [2]

Finally, the emphasis placed on theory in philosophy, in contrast to the practical side of it, which alone seems to

[1] See supra, pp. 47 et seq.
[2] Hoernlé, *Studies in Contemporary Metaphysics*, p. 44.

impress the pragmatists, is undoubtedly not misplaced. However, we must not exaggerate. Theory in philosophy does not exist merely for its own sake. It turns, too, upon practical needs and subserves practical ends. Philosophy is something more than the "science of the possible." And what we must look for from philosophy, and what we shall continue to look for, if we would be true to our trust, is a satisfactory and satisfying combination of both theory and practice in a synthesis which, while it does not fail to scan the higher things, is at the same time not too proud to stoop to the lower.

The Limitations of Science.—In speaking of science so far, no effort was made to point out the limits beyond which scientific procedure and results cannot be extended without doing violence to facts. Science has its well-defined limits, and no one is more ready to acknowledge the existence of gaps, lacunæ, and even blind alleys in the field of scientific theory and fact than is, be it said to his honor, the scientist himself. These limits are of two kinds—intrinsic, the natural limitations of the mind of the observer, and extrinsic, the material universe itself which, for many reasons, as we shall see below, makes difficult if not impossible a total view of the processes which operate therein. A frank recognition of these boundaries set to natural knowledge, on the part of both scientist and philosopher, will go a long way in the direction of dissipating many of the difficulties which obscure the problem of the relations of philosophy to science.[1]

From the side of the observer, the congenital limitations of the human mind make a completely satisfactory expla-

[1] For a very excellent treatment of this topic, see J. Arthur Thomson, *The System of Animate Nature*, Vol. I, pp. 13–25. I have summarized in the briefest fashion Thomson's statement.

See also Poincaré, *The Value of Science*, trans. by Halsted, pp. 321–395; Perry, *Present Philosophical Tendencies*, pp. 85–109.

nation of nature practically impossible. Our senses are determined in their range of possible observation by physiological boundaries, which make perfect exactness and finality in our knowledge of the world impossible. It is quite true, of course, that the range of sense knowledge has been immeasurably widened by the discovery of numerous instruments, like the telescope and the microscope. In spite of these aids, scientific observation still remains partial and incomplete. There are myriads of objects, organic and inorganic, which escape our vision—a fact which should engender a becoming humility in every follower of science.

Again, scientific generalization is the result of a process of mental abstraction. In science we abstract, in our consideration of any effect, from all determining conditions except the special one under analysis. Living things, for example, may be studied in abstraction from the ambient in which they live. In such cases, the abstraction is obvious and in the conclusions we draw account is generally taken of that fact. However, in other cases, the abstraction is not so patent with the result that a foreign and unproved principle is sometimes smuggled into a scientific theory to the confusion of all concerned. To study, for example, living things in terms of mechanical movement, or of tropisms, and then to conclude that animal behavior is solely mechanistic, is nothing short of a disfiguring of the very characteristics which make living beings different from non-living.

Not only are our powers of observation limited, but the amount of exact data which we actually possess on any given problem is woefully small in comparison with the wide field which a scientific generalization constructed upon the data known to us embraces. It cannot be denied that the truth of a generalization does not depend on the accumulation and verification of every possible datum. However, a generalization must always leave open the door

to possible correction in the light of subsequent discoveries. This fact of possible modification, due to new discoveries or to a more profound study of a scientific truth by later thinkers, makes present-day scientific generalizations, no matter how well-founded, tentative and approximate approaches to truth, and not in any sense of the word the final dictum on the problem under discussion.

Furthermore, a statement of any given effect in mathematical symbols does not exhaust, as it is too often assumed, the full possibilities of that effect. Neither is the function of prediction synonymous with a total description of the objects under consideration. Prediction in itself is but a by-product of scientific accuracy, as are the practical applications to which a particular theory may be put. The primary function of science is not to predict, but to discover causes. Whether these causes as explanations are exhaustive or not depends on the attitude with which we approach a problem. If we seek a partial explanation, they may well satisfy all our demands. The applicability, whether partial or total, of an explanation, therefore, depends on what attitude we assumed as we studied the problem under consideration.

Science only deals with the more or less obvious. As such, it makes no effort to penetrate the final secrets which lie hidden behind all things. What it takes up and considers is the object present, *hic et nunc*. In order even to generalize about this it must assume the existence of matter as well as the existence of the scientist who studies matter. Supposing the scientist can learn all there is to be known *about* matter, there still remains the problem of what matter is. The further back he pushes his researches, the more complex and the more difficult his problems become. He finally reaches a stage where he can go no further with the apparatus at his command. It is there precisely that the philos-

opher takes up the burden of the quest and pushes his investigations to the point where the vision of the philosopher tries to see what is hidden from the eye of the scientist.[1]

We are not, in all this, attempting to cast suspicion upon the proved results of science. Both scientific method and its conclusions have won for themselves an assured place in the process of gaining intellectual control over the forces of nature. Science, by its exact descriptions of phenomena, not only increases our knowledge of these phenomena, but to that extent makes more certain our mastery of nature. However, it must not be forgotten that all scientific generalizations do not possess an identical value. In our enthusiasm for science we are apt to confer upon mere guesses or tentative theories the same power to achieve certainty as we do on proved and generally accepted results. Supposition, conjecture, probability, all play an important rôle in our scientific constructions. The results based upon such approximations are clearly to be distinguished from those which are in great measure independent of any purely hypothetical formulation.

Moreover, the philosopher cannot but view with alarm the efforts being made by some scientists to dispossess him of his proper field of inquiry, recognizing that such attempts, due to the nature and limitations of science, are doomed to disappointment. The cause of truth will not be advanced by the substitution of a view of the universe which is essentially

[1] "No body of scientific doctrine succeeds in describing in terms of laws of succession more than some limited set of stages of a natural process; the whole process—if, indeed, it can be regarded as a whole—must for ever be beyond the reach of scientific grasp. The earliest stage to which science has succeeded in tracing back any part of a sequence of phenomena itself constitutes a new problem for science, and that without end. There is always an earlier stage and to an earliest we can never attain. The questions of origins concern the theologian, the metaphysician, perhaps the poet."—Schuster and Shipley, quoted by Thomson, *The System of Animate Nature*, Vol. I, p. 21.

limited for one which is total and final. On the other hand, philosophy has no criticism of science for raising constantly, as it does, ultimate questions. But that it lies within the province of science to answer adequately these problems is a contention which philosophy cannot admit. Over and above the processes of science, there exist both a field of problems and a method for studying them, which is properly philosophical. It is neither in the true interests of science nor of the progress of human knowledge for scientists to essay a usurpation in a realm which transcends the empirical order. Science is description, philosophy interpretation. Both must coöperate to obtain a total and harmonious view of the whole of nature and of human experience.[1]

The Meaning of Philosophy.—We have written of Philosophy as if it were a simple subject. As a matter of fact, it is singularly complex. On the one hand it bears close and definite affinities with religion, while on the other it relies to a large extent upon the conclusions of scientific research. It differs from religion both in the subject-matter it treats and in the methods it employs, yet its viewpoint includes many problems which are essentially religious in character. Mankind looks to philosophy not only for assistance on questions which transcend the range of science, but also for guidance on many of the problems of ethics and

[1] "The revived attention to logical methods of the sciences is killing the crude sensationalism of the days which saw the first publication of Mach's *Science of Mechanics* and Pearson's *Grammar of Science*. The claims of 'induction' to be a method of establishing truths may be fairly said to have been completely exposed. It is clearer now than it was when Kant made the observation that each of the 'sciences' contains just so much science as it contains mathematics, and that the Critical Philosophy was fully justified in insisting that all science implies universal *a priori* postulates, though it went wrong in thinking that these postulates are laws of the working of the human mind or are 'put into' things by the human mind. How far Science has moved away from crude sensationalistic empiricism may be estimated by a comparison of the successive editions of the *Grammar of Science*." Marvin, *Recent Developments in European Thought*, p. 59.

See Perry, *Present Philosophical Tendencies*, pp. 45–108.

life, religion and God, which touch so closely the welfare of each one of us. Others view philosophy more especially as science, and depend upon it to solve the many questions which science, because of its limitations, will not or cannot answer. That these diverse expectations need not be looked upon as contradictory, but rather in the light of complementary functions, we shall endeavor to point out.

Philosophy, too, presents analogies with art, since imagination plays a very conspicuous rôle in the building of every philosophical system. Philosophy is literary, speculative, doctrinal. For an understanding of philosophy, therefore, its many connections with science, art, religion, and life must not be lost sight of.

Philosophy may be defined as wisdom. But wisdom is of many kinds. It is, in the first place, of a most elementary type. Such wisdom is, for practical purposes, synonymous with the universally accepted conclusions of common sense. These conclusions are regarded as final, but they have not been analyzed and criticised by those who accept them. However, their truth is sufficiently evident to all of us that we may live and act by them. But no conscious effort has been made to reach a more profound acquaintance with these truths, or to test out in every possible way their validity. Such is the philosophy of the man in the street, which presents many analogies with the position of him who accepts the elementary parts of each science but does not enter into controversial questions or into those questions which require continued and difficult study. He accepts as much of science as is necessary to get along with in this world.

Now, "common sense, in spite of the obloquy cast upon it in certain schools of philosophy, still asserts its position as the ultimate tribunal before which all speculation has to

justify itself." [1] Common sense is the starting point of all knowledge. Although its beliefs may not be all equally well-founded, still it exhibits a solid nucleus of truth which must never be lost sight of, either by the scientist or the philosopher. Both in the sensible and in the intellectual order certain facts and principles, as for example, the tri-dimensional character of bodies or the principle of identity possess a validity beyond question. Likewise, the immediate conclusions which the human mind draws from these facts and principles are spontaneous expressions of a certitude which no amount of argumentation can shake. Such beliefs and judgments are called the judgments of common sense, because they are the common possession of every rational man. Their certitude is, in every sense of the word, equal to that which the truths of science possess. We cannot deny these truths without doing violence to the natural and primitive judgments of the human mind itself.

The deliverances of common sense form the groundwork for the philosophy of the plain man. They speak to him not merely with the authority of universal consent, as the Scottish School contended, but as truths founded upon evidence which is undeniable.[2] However, the ensemble of these common sense truths exhibits a very imperfect picture of what we understand by a philosophical acquaintance with reality. Just as the embryo is an organism but not completely developed and organized, so a common sense philosophy is to a scientific philosophy as the embryo is to a

[1] Merz, *History of European Thought in the Nineteenth Century*, Vol. III, p. 3.

[2] The position of Reid, which would make of common sense a special faculty of an instinctive character, is explained by Pringle-Pattison, *Balfour Lectures on Scottish Philosophy*. The intuitionistic or sentimentalistic theory of such thinkers as Jacobi and Bergson, who view sentiment or intuition as a higher and superior faculty for finding truth, falls into the same exaggeration, though from another side, as the Common Sense Philosophy of Reid. There is but one way to know truth, namely, by the intellect. Neither common sense nor intuition should be contrasted with intellect, since both are but functions of mind.

fully developed and active man. The difference between the two is one of degree. Philosophy accepts the facts which sense perception brings to us, as well as the first principles of knowledge which are self-evident, but it analyzes and criticises these presentations before it uses them as the starting point for its formulations. Its approach to them is scientific, in the sense that where everyday knowledge stops it pushes on its investigations and attempts both to justify and to extend the data observed by every man in his ordinary contacts with the world and with life.

Now, although philosophy recognizes fully the authority of common sense, it does not depend upon this authority as the foundation for its theories. Philosophy cannot contradict common sense, except under pain of becoming fantastic and irresponsible. It must justify its beliefs, though by a higher evidence than that of common sense. For philosophy bases itself on the natural evidence of the human intellect, not on any instinctive or intuitive beliefs. Thus interpreted and correlated with philosophy, common sense assuredly does not deserve the severe criticisms to which it has been subjected by thinkers of the idealistic and rationalistic schools. To commence our study of the problems of philosophy by explicitly and deliberately casting overboard the facts and principles admitted by mankind in general and denying to them all speculative value whatsoever, is to throw away the best and most certain support which any philosopher can have in his journey towards total and ultimate truth.

The student of philosophy must always begin with common sense. As he progresses in his search for truth, he must constantly hark back to common sense, as to a guiding and corrective principle. Having arrived at conclusions, he should doubt most strongly any of them which do not harmonize with the generally accepted truths of mankind.

In philosophy, as in every field of human endeavor, we do not attain perfection by discarding beforehand or refusing to recognize the validity of the imperfect. There is progress in truth as there is in life. Only by accepting the imperfect truth with the purpose of perfecting it, may we hope to pass some day to that superior and complete knowledge which science holds out to us.[1]

The Function of Philosophy.—Philosophy, in the technical sense, embraces all those subjects which treat of the ultimate principles of life, thought, and being. To become a philosophical science, therefore, it is both necessary to consider certain restricted subjects and to consider them in a philosophical manner. The movement which has gained great headway to divorce the different philosophical disciplines from the parent trunk and to make of each one a single and autonomous science, leaving to philosophy only the field of the purely conjectural, the moral, and the religious, cannot but result in the destruction of philosophy itself. If a subject is philosophical, it is so because its approach is philosophical, not because it lacks, as philosophy, either precision or exactitude. Philosophy does not acquire the total or ultimate viewpoint by desiring to become science, in the narrow sense of the word. To be concrete, logic is an exact science, as rigorous and as scientific as mathematics. But because it is a science, does it follow that logic ceases to be *eo ipso* a philosophy? Logic concerns itself with human thought, viewed in its most essential and universal aspects. It is, therefore, metaphysical since it embraces every *possible* situation in which thought plays a part. Logic deals not only with my thought, or your thought, or thought in general, but with thought itself. A science, therefore, which searches the

[1] Maritain, *Introduction Générale à La Philosophie*, pp. 87–94.

very depths of thought assuredly gains nothing by becoming either mathematics, physics, or astronomy, or by using the methods of these sciences. Every science, it may be admitted readily, aspires to take a more or less complete view of the part of nature which it investigates. To that extent these sciences serve as a preparation for the philosophical viewpoint. They cannot, however, without losing their distinctively scientific character, assume to speak on the universal, necessary, and eternal character of the subjects which they study. Such pronouncements are the exclusive function of philosophy.[1]

What has been said of logic may be repeated of psychology, ethics, and esthetics. Psychology as science is merely the physiological viewpoint of mind. Such a viewpoint is laudable, but is it sufficient, is it final? Only on the theory that mind and brain are identical—an assumption which postulates more than even the most metaphysical psychology has ever demanded of us. Ethics and esthetics, too, become unintelligible if viewed solely from the laboratory or historical angle. There is something in each philosophical science which transcends the temporal, the contingent, the quantitative. That something is the ultimate cause. Philosophy searches out these ultimate causes. By criticisms of a final character, by an analysis which reaches down to the last causes, we recognize a philosophical science and distinguish it from one of the particular sciences. Philosophy thus means "seeing things together." It is what Hoernlé calls the "synoptic vision." [2] To say that such vision is impossible is to argue that man cannot think properly, that it is impossible for him to reach final conclusions about anything.

Final conclusions, however, are not reached until we have

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 151–163.
[2] *Matter, Life, Mind, and God*, p. 1.

made a long and detailed examination of many things of a preparatory nature, which must be settled even before it is possible to ask of ourselves final questions for which we expect to find final answers. Philosophy does not proceed in a haphazard or unmethodical fashion. No less than science, it goes step by step, criticising here and verifying there, until, sure of its position, it finds itself prepared to establish the existence of such relations as indicate a rational dependence amongst things. Thus prepared by analysis, it is ready to fashion a synthetic view of reality.

The preparatory exercises of the philosopher have to do with the deliverances of common sense. These he must know and try to evaluate. From common sense he passes on to logic, whose laws he discovers to be the foundation of all thought and reasoning. The next subject for consideration is the particular sciences. At the basis of all critical thought lie the mathematical sciences. Philosophy tests the primary principles, as well as the consequences of mathematics, and points out their relations both to the other sciences and to philosophy itself. Physics, chemistry, and especially the biological sciences, comprising as they do the principal avenues of approach to the physical world, inorganic and organic, furnish a great mass of the material for further investigations in the philosophical sciences. Not only is this material of interest to the philosopher, but the philosophy of the methods which these sciences use, as well as the philosophy of the sciences themselves, constitute an introduction to an exact and detailed study of the last principles of nature itself. After analysis and criticism of these data, philosophy then commences to walk the difficult path of synthesis. Each science has its own field, possesses its own conclusions. These we collect, criticise, and build into a system, into a philosophy of nature.

Up to this point, however, we have taken no account of

the phenomena of mind, which undoubtedly possess most interest for the thinker. What does biology, physiology, psychology tell us of the concomitants of mind? We must collect all the information possible concerning the physical and physiological aspects of our mental operations. But we do not merely think, we will and act. Human activity exhibits itself in a maze of productions, artistic, social, economic, political, and religious. Philosophy enters into this practical field, and tries to organize into an intelligible whole the many and apparently conflicting purposes and ideals underlying all these manifestations of the human spirit. From amongst this mass of ideas some will stand out in bolder relief than others. These are the dominant ideas of the individual, of the century, of the race. Are they true? Are they good? Why should man be dominated by this particular idea rather than another? What is the value of this idea, both in itself and for practical outcomes? Such questions, too, philosophy asks and endeavors to answer.

Ideas, however, are not merely practical. As ideas they have a history, and present problems which must be solved. Are ideas merely subjective or do they present an essentially objective reference? What is it to know? Beneath the surface of every problem, scientific or philosophical, flows the steady current of the epistemological problem. It must be examined and we must take a position. We cannot be neutral in the face of the claims of idealism, pragmatism, or realism for our support. Again, things exist, either in the mind or outside the mind. But what does it mean to be a thing, what does it mean to exist? The mind is a thing, the body is a thing, God is a being. But are they all beings in the same meaning of the term? Surely God as being must be quite different from a stone or a man. In what does this difference consist?

The philosopher must discover all he can about being. He must know what substance is, what accidents are. In every other way he must attempt to satisfy the intellectual curiosity which urges him on to a synthesis of all reality. The philosopher's quest is a long and arduous one, beset by many difficulties. Is it any wonder then that there should have been pointed out to mankind so many and divergent ways to attain his goal, or that philosophers should not be in agreement as to which is the surest and quickest route to follow? Should we even hope for the coming of a day when all difficulties shall disappear and our journey made safe and easy? Until scientists are in perfect agreement on all the points of their doctrine, in a word, until human knowledge is perfect, and not until then, can we hope for unanimous agreement on the doctrines of philosophy. In the meantime, both scientists and philosophers must continue to labor, conscious of the fact that each addition to human knowledge brings us closer and closer to the day when we may expect to reach the philosophical synthesis which all mankind will embrace and accept. The spirit of philosophy is essentially synthetic. In its best and truest forms, nothing satisfies it but a complete and final view of all things, science, thought, and life. And it can only surrender this passion for wholeness if it is ready to give up, at the same time, truth itself, the driving power which has, since the dawn of civilization, sustained and comforted the greatest thinkers in their search for a comprehensive thought.

Philosophy, viewed as the science of wholeness, is what we call Metaphysic, and deserves the appellation "science" no less than any of the particular natural sciences. It is a general science, yes, but it is none the less a science. The materialistic conception of being, which restricts all being to the realm of observable fact, is itself an egregious meta-

physical assumption, the direct result of which is to narrow for the sensist his conception of science to those subjects which deal directly with sensible facts. That there is a metaphysical no less than a physical reality, that there can exist by consequence a metaphysical no less than a physical science, appears to us unquestionable. No man may deny the existence of general ideas. If such general ideas exist, and they do, by what right or by what logic is it permissible to restrict their extension to the abstract concepts and definitions that have come to us through an analysis of factual reality, and to deny that extension to the equally real though more profound ideas which also represent to us reality, although freed from the determinations of time and space? [1]

Philosophy, therefore, is science, though not in the narrow sense of the word. The efforts of positivist thinkers to reduce philosophy to a species of science can but result in a disfiguring of philosophy and in a misinterpretation of its essential rôle in the process of gaining a synoptic view of the universe. The scientific dogmatism of the last century, which reached its zenith in the philosophy of Herbert Spencer, coupled with the rationalistic dogmatism which began with Kant, effectively changed the whole modern conception of the place of philosophy in speculative thought. Naturalism, either in its naïve or critical form, read philosophy as a general science out of existence. Every category or concept which could not be verified on empirical grounds was looked upon as non-existent. Truth and sense knowledge were thus held to be synonymous. Philosophy as science having been honorably buried, Naturalism set itself up as the sole interpreter and custodian of all knowledge. Kant tried to save the validity of philosophy by conceding truth to such fundamental ideas as God, liberty, and immor-

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 203–230.

tality in so far as they are the products of the moral self. Viewed simply as ideas, their existence cannot be proved, since the noumenal reality escapes our knowledge. Neither can we prove the real existence of the temporal and spatial elements which enter into all our judgments, since the concepts of space and time are essentially a priori and have no direct reference to reality at all.

Philosophy, however, in our opinion must be rescued from both these false attitudes. At one and the same time, its scientific character must be preserved and its dependence on intellectual synthesis recognized as valid. It is an exaggeration to overemphasize the rôle of positive science in the formulation and proof of philosophical theory. It is a minimizing of the function of the intellect not to recognize that we are capable of knowing the truth about things outside and above the field of the phenomenal only by and through the moral judgment. The balance between science and philosophy on the one hand, and science and belief on the other, must be rigorously and exactly maintained if we would not distort the true meaning and function of philosophy. This can be done if one would recognize the essentially descriptive and analytical character of science as a preparation for the interpretative and synthetic character of philosophy.

Philosophy, however, is not self-sufficient, nor all-inclusive. It mediates between theory and belief, assuming to itself what is true in theory and using this as a means of approaching what we must believe. As theory is not the whole of knowledge, so philosophy is not the whole of life. Beyond any truths which can be proved by the light of human reason alone, there exists the realm of religious beliefs. Philosophy cannot, if it would fill the deeper needs and tendencies of human nature, fail to give expression to the beliefs which control human acts. Philosophy, there-

fore, is something more than an analysis of the true, the good, and the beautiful. Its practical character must be appreciated, since it comes before us likewise as a mode of life, and as such, attempts to formulate the guiding principles which lead mankind to the possession of that justice after which the race has always hungered and thirsted.

The Schools of Philosophy.—The number of conflicting schools of philosophical thought seems to militate strongly against the pretension of philosophy that from its study there shall result at some time a total view of life and thought, a veritable *Weltanschauung*. The apparent unity of scientific speculation serves only to throw into bolder relief the opposing claims of philosophers. The history of philosophy appears to carry a very significant lesson for him who wishes to judge in a dispassioned way the claims of philosophy to be scientific. Every great thinker has founded a school. Now, a school is merely one way of looking at the universe, or rather one way of making the world conform itself to what our views concerning it are. In all this the personal element is as prominently present as it is conspicuously absent in the constructions of science. Philosophies are ordinarily called after the names of the men who invented them. Science, however, repudiates such connections with the individual investigator. What the scientist discovers is a fact, not a theory. As long as his discovery remains within the circumscribed limits of pure theory or hypothesis, it retains the earmarks of its authorship. The moment it becomes scientific fact, it sloughs off the shackles of its former slavery and becomes the free common possession of all mankind.

For many minds this is unquestionably a very serious objection against the position which philosophy claims must be accorded to it. The force of the objection, however, is

considerably weakened if we recall that, in its long history, philosophy presents something more than the mere record of opposing opinions. That philosophers have disagreed amongst themselves, and radically, is beyond question. But so have scientists. The disagreements amongst philosophers may be readily understood when we consider for a moment that the questions under discussion are not such that an appeal to sense observation can settle them. These problems affect the most fundamental and far-reaching principles of life and thought. Is it any wonder, then, that thinkers should not agree in such cases? Nor should it be necessary to point out the disagreements which divide scientists when we pass beyond the most elementary principles of each science. Disagreement in neither case should be brought forward as an argument against the claims of philosophy or of science. It can be urged equally well against every form of knowledge, and, to our way of looking at the question, proves nothing more than that the human mind is limited and that our knowledge is essentially fallible. If philosophers have disagreed, then we can only continue to labor and wait for the day when, because of new arguments or new syntheses, a philosophy shall be elaborated which shall stand the severest tests and be found generally acceptable to all men of good will. In the meantime, let us not forget, neither science nor philosophy is advanced by mutual recriminations.

Again, the disagreements as a rule have affected only the underlying principles and have divided philosophers into schools whose divergent characteristics result from a totally different approach to the problem under discussion. A philosophy comes before us as a systematic solution, not as one out of a multitude of theories about reality. It, therefore, sums up in itself the answer, not to one, but to practically every possible problem in philosophy. For example, the

lines which divide Idealism, Pragmatism, and Realism are not merely epistemological. The differences between these standpoints manifest themselves in Psychology, Ethics, and in Metaphysics as well. They present three diverse ways of looking at not one, but at all the problems of thought. Is it any wonder then, that in the secondary and more remote conclusions which are drawn from these fundamental viewpoints, the mark of division is much more prominent than it would be amongst scientists who practically agree on fundamentals, but disagree merely as to remote conclusions?

There is a sense in which it may be said that no philosopher, not even Plato or Aristotle, founded a school. These thinkers created or personified certain tendencies of human thought; they were the mouthpieces of the best thought of the age in which they lived, but neither had a successor nor heir in the strict meaning of the word. Their great influence, even at the present day, is undeniable. But their successors immediately began to go over their work. It was studied in the light of each man's culture and insight. Modifications ensued, clarifications followed, arguments were developed or refined. In time a totally new speculation arose to command the assent of mankind.[1]

The philosophies of antiquity which held sway for so long over the minds of men, like Epicureanism or Stoicism, were much more than a theory. They were a rule of life, a faith, a religious doctrine, and their domination resulted more from their ethical than their strictly intellectual import. Christianity, which succeeded upon the ancient philosophies, was not at first a philosophy. It, too, was a belief, a mode of life. If the Christian religion had been a mere philosophy, one might question the probability that it would have endured to our own day. In the Middle Ages,

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 292 et seq.

philosophers attempted a union between theory and belief, and one of them, Thomas Aquinas, succeeded in thinking through the most systematic formulation of philosophy and religion which has yet appeared. This synthesis he incorporated in the justly famous *Summa Theologica*. The unity of philosophical speculation, so prominent a characteristic of mediæval thought, was the direct result of the fact that the same religious beliefs were accepted by all and governed the life of every man. The vitality of mediæval philosophy owes a great deal to the union which it effected with the reigning Christianity. And its hold upon mankind can best be explained in terms of the vitally religious significance which the teachings of the School possessed for every individual thinker.

The union between philosophy and religious thought continued in full vigor, though often challenged, until the beginning of the nineteenth century. For religion, science was then substituted and on the foundations of positive fact a new religious philosophy, that of Humanitarianism, was erected. The Christian revelation was either denied altogether or passed over in silence. The highest and the best of ethics and morality, however, were taken over (without credit) from Christianity, and the philosophy of Positivism tried to teach men how to live Christian lives divorced from the acceptance of Christian ideas and principles. Contemporary thought has been severely critical of these attempts at formulating a religion without God. The insufficiency of Positivism is manifest to all who wish to see it. That the religion of Positivism does not respond to the exigencies of the religious spirit, nor fill the needs of the religious conscience, nor satisfy even the demands of scientific or speculative thought, is for the majority of present-day thinkers an unquestionable judgment. The efforts to devise a philosophical credo which can stand by

itself have been weighed and found wanting. The whole process seems to-day to be compounded of a false reading of the true nature of religion and of science, and a misconstruction of the true nature of philosophy. Positivism at this hour commands allegiance only amongst those who have definitely renounced all hopes of attaining a synthetic view of the universe outside the realm of scientifically observed fact. It has not developed and made certain the philosophies of the past; on the contrary, it has but interred them, and proclaimed to the whole world that for the great problems of life and of thought, we are not only ignorant of the solution, but we are incapable of ever arriving at a solution.

Is There a "Philosophia Perennis"?—The student of philosophy is very much impressed with the historical succession of philosophical systems, beginning with the crude efforts of the early Greek thinkers and ending in the scientifically constructed philosophies of our own day. This succession is apt to impress him in two different but closely connected ways. On the one hand, the fluidity of philosophic thought is likely to strengthen his ideas of its unscientific character and to make him suspicious of the efforts of philosophers to place their subject on the same basis as experimental science. On the other, he is likely to be led away by the thought that philosophy, like science, is capable of indefinite perfectibility. Both of these judgments have their roots in the thesis that philosophical truth is essentially relative and variable. For the Hegelian, since mind is in a continual process of becoming, no limit of perfection can be conceived where we can say, thus far you may go and no farther. This view of philosophy has received added support in our own day from an almost general acceptance of the evolutionary standpoint in philosophy.

The inspirational side of such a view may merit unqualified approval. Its logical value, however, is another matter and cannot, we believe, be accepted. For diversity of judgment is not always the result of the impossibility of understanding a thing. Neither does it follow that conflicting views point to the chimerical character of the object over which a disagreement exists. Objects, especially living objects, are many-sided. It is possible to view them from many and totally different angles. Diversity of judgment in such cases does not spell error. The face of a friend, though well known to one, may present one appearance today, and quite a different one to-morrow. The text of a book exhibits a different reading as I approach it from a changed intellectual or emotional starting point. In all these changes, however, there is a certain amount of fixity, and it appears to us unjustifiable to state that a subsequent and more complete judgment of a friend's appearance or of the meaning of a text negatives my prior understanding.

Now, philosophy, since it is a search for the reasons of things, suffers from the same instability that every human judgment does. The facts about which we reason may not be clearly perceived, the causes for these facts may escape the most untiring search, or a cause may appear to be sufficient on present examination which would be held insufficient after longer reflection. Disagreements naturally result. However, there may be no disagreement at all concerning the fundamental facts. On these, as a matter of fact, there exists agreement. The philosopher, it must be remembered, is always a man. He, too, accepts and is guided by the deliverances of common sense. These deliverences he analyzes and criticises, but he does not create them. Here, at least, is a fixed point—a point from which every philosopher starts out and to which he must eventually return.

The history of philosophy confirms this analysis. Indefinite progress in philosophy is refuted by the very existence of thinkers like Plato and Aristotle, philosophers who dominated, and continue to dominate, present-day thinking. Changes there have been. Each age has produced thinkers whose writings correspond exactly to the aspirations and the particular ways of looking at the problems of that age. But beneath all the oscillations of philosophical theory there have remained constant and fixed certain principles which can only be called into question under penalty of introducing anarchy into philosophical thought. Philosophy is not like Melchisedec, without father, without mother, without ancestry. There is an ancestry for every system of philosophy, which dates back to the very earliest times, conferring thus upon present-day thought a prestige which even the oldest human dynasties lack.[1]

Again, speculative disagreements need not connote disagreements as to fundamental principles. Idealists may not agree amongst themselves in their explanation of the origin and development of thought, although all are in agreement as to the essential spirituality of mind. Epistemologists disagree in their analysis of what certitude means, but all are agreed that there must be some such thing as certitude. Materialist and dualist are one on the real existence of matter, despite a disagreement as to the place which must be accorded matter in the general scheme of things. No one by all this wishes to deny the influence of time, place, or of race upon philosophical constructions. Social,

[1] Newman, in a well-known passage of the *Idea of a University*, p. 109, brings out the stable character of philosophical thought. He writes: "While the world lasts, will Aristotle's doctrine on these matters last, for he is the oracle of nature and of truth. While we are men, we cannot help, to a great extent, being Aristotelians, for the great master does but analyze the thoughts, feelings, views, and opinions of human kind. He has told us the meaning of our own words and ideas, before we were born. In many subject-matters, to think correctly, is to think like Aristotle, and we are his disciples whether we will or no, though we may not know it."

economic, racial, and religious influences deeply affect every man's reading of the universe. And philosophy exhibits a character which reflects only too well the earmarks of an age, an epoch, a nationality. But from this admission to an acceptance of the materialistic conception, which looks upon philosophy as merely the product of the economic conditions which prevail at any given time, is a long and illogical jump. Philosophy is life, is movement. But beneath the ever-changing current of opinion there flows a steady stream of truth which, if we look below the surface of our disagreements, we can see. "Side by side with the things which are subject to change and belong to one condition of the life of mankind, there is a soul of truth circulating in every system, a mere fragment of that complete and unchangeable truth which haunts the human mind in its most disinterested investigations." [1]

Philosophy must never fail to base itself upon life and upon the commonly accepted beliefs of mankind. It is as true of philosophy as of morality, that an extreme singularism only leads to the bizarre and the ridiculous. The man who supports a strangely individualistic line of conduct is no less certainly in error than the thinker who cuts himself away deliberately from the past or from the fixed beliefs of his fellows. We do not mean to condemn individuality in thought. But individuality carried to the point where it denies the fundamentals of life, the common things which we all possess because we are living human beings, can only fall to the ground by the sheer weight of its own unreasonableness. Philosophy, on the other hand, should not be static. Its principles must be gone over, again and again. By means of discussion the fixed points will be made more firm, the disputed points clarified and finally dissolved.

[1] De Wulf, Article "Philosophy," *Catholic Encyclopedia*, Vol. XII, p. 34. Consult also Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 333–360.

A final and definitive philosophy is beyond all hope, the human intellect remaining what it is. But assuredly we do not help along the progress of philosophical inquiry by assuming beforehand that all is essentially relative. Chesterton remarks that progress may be of two kinds—up hill and down hill. Let us assure ourselves of progress up hill by holding on firmly to the fixed principles of philosophy. The primary and universally acknowledged principles of common sense, the facts of positive science, the axioms of thought, the evident conclusions which can be deduced from these axioms—these must be our starting point. From these the philosopher will progress in his upward journey to a synthesis which, while neglecting nothing acquired in any field of knowledge, will sum up in itself the highest and truest vision of the universe of which man, through the unaided light of human reason, is capable.

Philosophy and Morality.—Philosophy is something more than an analysis of the material and intellectual factors which make up and explain the universe in which we live. An overemphasis of the theoretical side of philosophy may easily incline one to the opinion that when we have explained reality our task is over. Such is not the case. Besides theory, philosophy is a life. As a critic of life and as a guide to action, it holds a most important place in that total view of the world for which we are ever searching. All will agree that the moral consciousness is no less a fact than are the facts of science and psychology. A theory of morality, therefore, must be developed by the philosopher if he would possess a complete and well-rounded view of human nature and of the relations of mankind to the universe of which he forms a part.

Every great system of metaphysics has exhibited a moral tendency, over and above any specific program of ethics

which it may have defended. It has thus recognized that man is something more than a mere thinking machine, that no matter how logical and convincing its own system of ethics may appear to be, back of ethics there lies something which is more final than the authority of reason. Mankind has always recognized the sanction of religious authority in giving significance and value to the course of action imposed upon it by the moral reason. This superior sanction of morality, the existence of which the history of human morals attests only too well, cannot be disregarded by any thinker who would adequately describe and evaluate those influences which have deeply affected the lives and purposes of mankind.

Man acts by reason. He is also a moral being. But is reason, taken alone, capable of supporting a moral code whose appeal is irresistible and whose authority would not be questioned by us? That there exist men who live by reason and look no further for any justification for their lives than to the approval of reason, we may readily grant. An ethics, which will appeal to some men, can be constructed on the basis of reason alone. This, however, is a purely theoretical statement of the question. Actually, men demand a superior authority for their actions than the dictates of the moral reason. And it is of the great majority of men, and of the motives which sway them, not of the few or the extraordinarily high-minded, that we ask the question—is morality possible without a religious sanction?

The attempts to construct a morality independent of religion have been numerous in the history of philosophy. Every attempt has been a dismal failure, for all have battled in vain against a universal tendency of human nature which has ever sought sanction for its acts in a recognition of the existence of a Supreme Being from whom both nature and the moral order flow. A valid ethics which

would deny the existence and authority of God and expect to obtain the approval of the mass of men is a sheer impossibility. Nor is the supreme authority of the moral consciousness made intelligible to us by denying its existence. Philosophy may point out why, under any given circumstance, I should obey the dictates of conscience. But if I should challenge the authority of my conscience thus to guide me, where then must I search for the authority which can command me to act thusly and not otherwise, if not in the sanctions of religion? Ethics guides me in particular and not difficult cases. It remains for religion to evolve an authoritative line of conduct which must be followed by all men and under every possible circumstance. And religion, without a God, who has created man for a definite end and purpose, is a pure figment of the imagination.

Positivists and thinkers of the evolutionary school do not explain morality when they describe its history or development. Ethics is more than a descriptive science, like Physics, Botany, or Chemistry. Primarily, it is regulative, and establishes rules of conduct not merely to demonstrate that such rules can be logically thought out, but in order to guide and to control our actions thereby. Morality, therefore, is something more than a purely theoretical or historical Ethics. Morality involves a rule of conduct, a definite sanction, a valid moral obligation, the authority of conscience, none of which indispensable factors can possibly be found in any system which denies the existence of an All-Wise God, the author and end of the moral law.

Human life, to be viewed totally, must be considered from the moral and religious side. But the moral and the religious need not be regarded as contradictory, nor even as mutually exclusive. As a matter of fact, they are complementary aspects since in both we discover the selfsame

truths standing toward one another in an almost identical relationship. It is as impossible to divorce morality from religion as it is to divorce religion from morality, the advocates of an independent morality to the contrary notwithstanding. For religion can only be separated from morality if we suppose falsely that these two sentiments involve distinct and opposed elements of consciousness. Since morality is founded upon the rational will, it is assumed that it can in no wise be related to religion, which is supposed to be essentially irrational. But that religion, to be acceptable, demands a rational ground, we shall endeavor to prove below.

Faith presupposes and implies reason, and the rational correctly interpreted, leads to and is consummated in the religious. The rational always comes first. From it belief arises and to it belief constantly returns as to one and a most important source of its credibility. A separation of the moral from the religious sanction can only result in theoretical confusion as far as ethics goes, and in practical disaster for the individual man.

This conception of man, which views him as essentially religious, while founded upon reason, has its origin in revealed religion. No adequate conception of morality is possible if the philosopher fails to take into consideration the part which Christianity has played in the construction of moral ideals. The Christian revelation is not only an historical fact. Millions have lived by it, and live by it to-day. The ethical ideals which Christianity has preached continue to be the sublimest expression of moral conduct. At the basis of Christian ethics we find love of God and love of neighbor as the bed-rock principles upon which the superstructure has been erected.

Everything begins with love and ends in love. Love is the motive power and reward of all moral effort. And love,

as the Apostle writes, is God. The perfect view of morality, therefore, is not philosophical. Philosophy points the way, but revelation completes the ideal. Reason shows us a moral order in this universe and it exacts an obedience from us to the behests of this order. But the moral order as discovered by reason is fragmentary. Only in a union of the moral and religious conceptions of morality can we find a conscious realization of that correspondence with the Divine plan of the universe which is definitive, complete, and perfect.[1]

Philosophy and Religion.—The intimate connection of morality with religion brings to the fore the question of what place must be accorded to religion by the philosopher in his attempts to describe fully this universe in which we live.[2] A complete philosophy must take account of everything which, either directly or indirectly, influences the life of man. It is only a narrow and superficial viewpoint of philosophy which would restrict investigation to the limited field bounded by empirical fact. Belief, likewise, is an integral part of the intellectual and moral make-up of man. Moreover, religion has always contended that it can offer, and authoritatively, the solution of certain problems which deeply concern the philosopher. No matter what our attitude towards religion may be, logic forces us to investigate

[1] For a complete statement of the relations of morality to religion, consult Fox, *Religion and Morality*, pp. 156–162 and pp. 208–236.

[2] Recent literature on the relations of philosophy to religion is very extensive. The following works will enable the student to acquaint himself with the different viewpoints: Hocking, *The Meaning of God in Human Experience;* Balfour, *Theism and Humanism, The Foundations of Belief;* Collingwood, *Religion and Philosophy;* Martineau, *A Study of Religion;* Pratt, *The Religious Consciousness;* Pringle-Pattison, *The Idea of God;* Ward, James, *The Realm of Ends;* Ladd, *The Philosophy of Religion;* Eucken, *Christianity and the New Idealism;* DeBroglie, *La Definition de la Religion;* Boedder, *Natural Theology;* Joyce, *Principles of Natural Theology;* Garrigou-Lagrange, *Dieu, Son Existence et Sa Nature.*

For a history, Lecky, *History of European Morals;* Merz, *History of European Thought in the Nineteenth Century*, Vol. IV.

the claims it makes upon mankind, as well as the solutions which it offers to such questions as the existence of God, the freedom of the will, and the immortality of the soul. The history of philosophy stands witness to the close connection which has always existed between religion and philosophy. A fair conception of these relations is, therefore, required of all who would judge correctly of the function and place of philosophy in the general scheme of human knowledge.

Many thinkers look upon belief as an irrational act, or as an act which is completely independent of reason. But such is not the case. The rules of thought hold good in the field of belief, as they do in that of positive demonstration, for belief is no less a product of thought than is acceptance of scientific principles. Belief, however, is a distinct kind of knowledge from that acquired by scientific investigation. We *know* a thing when the reason for our affirmation exists in the thing itself. We *believe* a doctrine when the reason for our affirmation exists not in the thing, but outside of it. This acceptance on our part, however, need not be regarded as irrational. On the contrary, it becomes supremely rational if the reason outside the thing, namely, the authority of the person who speaks, is such that we can put implicit confidence in it. This appears very elementary to us, yet it is precisely because this clean-cut distinction between theory and belief is so often obscured or misstated that innumerable difficulties arise when we try to define the relations of one to the other. Now, religion is essentially a matter of beliefs, for religion is built upon faith, which accepts the doctrines presented to it, not because their rationality can be proved, but solely on the testimony of one in whom we can confide. The distinction between philosophical and religious knowledge is, therefore, a very fundamental one.

If philosophy and theology treat of distinct fields of hu-

man knowledge, it follows that the two cannot be confused without doing harm to both. Not only is the subject-matter of each different, but the starting point is not the same. Philosophy proceeds along the paths marked out for it by human reason. It depends upon no resources outside the human mind itself. Its method, therefore, is one which must look upon human reason as the only means which it can employ to attain truth. In relation to subject-matter, philosophy confines its investigations to those facts and phenomena which can be studied or perceived in themselves, and for which it seeks an ultimate explanation. Just as it would be little short of suicidal for philosophy to borrow from science the proper and exclusive methods of the natural sciences, so it would be no less dangerous to its own cause, if it would look at things from a strictly theological point of view or accept the methods of study current in theology.

Theology, on the other hand, is concerned with a region which transcends the powers of human reason. Since "the science of God" revolves about an object inaccessible to human investigation unless supported by Divine revelation, its methods and principles must have a different source than those of philosophy. The subject-matter of theology consists of dogmas, or articles of faith, which are accepted upon the testimony of God. Its independence of philosophy is, therefore, quite evident. No less autonomous, however, is philosophy which can invoke theological reasons in defense of its positions only under pain of becoming both unscientific and ridiculous. The two disciplines must be kept quite distinct. This statement, however, need not be interpreted in the sense that they must be separated to such an extent that no relations of any kind may exist between them. On the contrary, assuming the formal independence of each, the truths of one cannot contradict those truths

commonly accepted by the other. Just as it is true in every science, as well as in mathematics, that two plus two equals four, so likewise a dogma of revealed truth cannot be proved false by philosophy. This principle must always remain the groundwork for every attempt to define the relations which should exist between philosophy and theology. For truth is truth, in whatsoever sphere and by whatsoever means it has been attained. We cannot give up this principle without falling back into a scepticism which is destructive of all certitude.

The question as to when a particular theory is certain is quite a different and distinct one from the principle just enunciated. This certainty must be determined according to the methods proper to each science. Assuredly, it is no function of philosophy to lay down criteria for the establishment of theological truth, as it is no part of its work to fix the data and conclusions of any of the particular sciences. Holding an intermediate position between science and theology, philosophy looks both ways—in the direction of science for its empirical data and in the direction of theology for the solid truths of religion. As long as it consistently maintains this position, no fear need be experienced that it will ever fail us, either by assuming too much or by failing to accept enough.

Philosophy did not invent religion, which has existed as long as mankind itself. And religious truths, expressing themselves in moral and religious ideas, have ever wielded a powerful influence upon the minds and morals of men. These truths were not discovered by the philosopher as the scientist has discovered the laws of mathematics and physics.[1] He has done nothing more than to discover the reasons why men have believed in this fashion and acted

[1] Ollé-Laprune, *La Philosophie et Le Temps Present*, pp. 265 et seq. and particularly pp. 277–281.

according to certain moral principles. These religious beliefs are as old and as all-pervading as the very air we breathe. To live is to subject oneself to such influences. Now, the philosopher is also a man. As such, he cannot hope to be successful if he deliberately puts himself outside the interests of humanity. Both nature and reason lead men on to religion. In the fullness of time, Christ came, and, from His teachings, has arisen a doctrine which calls incessantly upon each one of us for our acceptance and support. The cause of truth assuredly is not served by closing one's eyes to this momentous fact, nor is the value of philosophy enhanced in our estimation by its failing to take cognizance of the position which Christianity occupies even today in the thoughts and lives of millions.

This idea receives added emphasis when we reflect that all philosophers, regardless of the positions which they have assumed, either explicitly or implicitly founded a religious code upon their principles. Idealism, with its insistence on the Absolute, turns logically to a union of man with God by means of contemplation as to the final outcome and triumph of its system. Materialism, by its denial of God, makes earth the sum and substance of human endeavor and finds its heaven here below.[1] Christian thinkers answer the question in quite another way. In no theory, however, is it possible to cut away altogether our philosophy from our faith. Belief is as necessary an adjunct to philosophy as breath is to life, for the reason that belief is necessary and intrinsic to thought itself. Theory, indeed, can carry us along a great distance in the search for truth, but there comes a time when theory fails us, and then we must reach out for the supports and assurances of faith. To refuse to

[1] For the religious consequences of Materialism, see Paulsen, *Introduction to Philosophy*, pp. 67 et seq.; of Idealism, Külpe, *Philosophy of the Present in Germany*, trans. Patrick, pp. 78–114; Perry, *Present Philosophical Tendencies*, pp. 188–193.

give our assent to the truths of religion because we do not see clearly why they must be so, is deliberately to condemn ourselves to a partial knowledge of reality. On the other hand, to concede to faith the place it rightfully occupies even in philosophy does not mean the opening of the floodgates of conjecture and of probability upon a realm whose proud claim is that it is essentially objective. For faith does not create the objects about which it is displayed. It receives them from above, from Him from Whom all truth and all philosophy are derived.

What does it mean to philosophize, to be a philosopher? To philosophize is to search for the last reasons and causes of all things. Philosophy sums up in itself the effort to give a reason why things are what they are, not in any secondary or derived manner, but in their ultimate and constitutive principles. This total view of reality necessarily carries along with it a view of life itself, as the most important and far-reaching element in our experience. Philosophy, too, is a science, not in the sense that it uses the methods of the particular sciences, but because it founds itself upon the results of science which it examines and clarifies, accepts or refuses to do so, as the case may be. Beginning as science, philosophy passes quickly to its special work, that of metaphysical speculation. Here, in a region which transcends sensation, it conducts its search for the ultimate why of all things. Being a product of the reflective reason, it examines critically the totality of nature for which it seeks a definitive and universally applicable explanation. It, therefore, is concerned with everything which touches our thoughts in any way whatsoever; of this totality it takes a synoptic view, and its conclusions are the last word of human thought upon the most fundamental questions which can be asked by us.

Philosophy is, first of all, speculation. It does not create

facts. Upon facts as known and accepted by the majority of men, and as analyzed and described by science, it reflects in order to discover the reasons why things are as they are. It, therefore, does not precede either common sense or the achieved results of natural science. But philosophy is practical as well, for it guides men to the acceptance and the living of ideals which the moral reason has justified beforehand, and which conscience informs us we must accept if we would live as rational beings. Thus conceived, philosophy leads mankind step by step not only to the attainment of the highest truth and to the living of the noblest ideals of conduct, but to the gates of faith itself, by which we may enter into the vision of Him Who is Infinite Truth and into the possession of Him Who is Infinite Love.

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